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SUPPORTING DEVELOPMENT IN THE KINGDOM OF SAUDI ARABIA
THROUGH CULTURE-BASED INNOVATION:
EXPANDING THE SAUDI NATIONAL FESTIVAL FOR CULTURE AND
HERITAGE INTO A NATIONAL PROJECT FOR INNOVATION AND DESIGN

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School of Design

Supporting Development in the Kingdom of Saudi Arabia through
Culture-Based Innovation:

Expanding the Saudi National Festival for Culture and Heritage into a
National Project for Innovation and Design.

Bakhotmah, Fawaz Abid

**A thesis submitted in partial fulfillment of the requirements for the
degree of Doctor of Philosophy**

June 2018

Certificate of Originality

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it reproduces no material previously published or written, nor material that has been accepted for the award of any other degree or diploma, except where acknowledge has been made in the text.

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THE ABSTRACT

“Supporting development in the Kingdom of Saudi Arabia through culture-based innovation” is a qualitative study directed toward decision-makers seeking solutions for development challenges. These challenges are, the economic diversification, the knowledge society stimulation, the design and innovation exploitation, and the culture and heritage utilization. However, the Culture-Based Innovation (CBI) is the outcome of a creative initiative that was launched in 2010 under the name Bellagio Mandala Group of Culture-Based Innovation. It aims to facilitate strategies and be a catalyst for innovative products and services that reflect the nation's culture and heritage.

The researcher wanted to stimulate this initiative and highlight its reputation in relation to three issues: 1) the historical correlation between culture and development; 2) the design and innovation benefits from advancement cultural development ; and 3) the development challenges facing Saudi Arabia due to unclear of creative cultural production model based on innovation and design practice.

One might ask the following questions: Is the researcher right in his approach about the conviction that culture-based innovation will be one of the suitable strategies to support development challenges in Saudi Arabia? And is it true that the advancement of Saudi culture and heritage through channels of innovation and design helps in finding various creative production platforms and a competitive economy?

To answer these questions, the researcher had to build the thesis methodology on three levels. First, the cognitive level, which means collecting cultural data through creative ideas, innovation concepts, designing products, society's opinion, and the field observations. Second, the philosophical level, which means approving culture-based innovation through four field observations by using cognitive data that based on five stimuli: looking beyondness (apperception stimuli), realizing diverseness (analysis stimuli), expanding relatedness (augmentation stimuli), gathering logicalness (synthesis stimuli) and clarifying unknowingness (understanding stimuli). Third, the practical level, which means promoting the Saudi national cultural and heritage festival to be a development platform through cultural-based creativity, innovation, and design.

The cognitive knowledge is based on Ibn Khaldun's civilization and urbanization thought, Malik Bin Nabi's thinking, things and human philosophy, and Paul Schafer's

culture approaches. These approaches are culture as institutional¹, culture as practical², culture as theoretical³, and culture as conceptual⁴.

To verify the significance of these attempts in reinforcing culture-based innovation, the researcher has conducted four field studies based on four cultural hypotheses. Each hypothesis is looking to approve that, the creativity, innovation, design, and the abilities of the talented has been one of the most important priorities that should busy the minds of decision-makers in Saudi Arabia, especially in relation to the development challenges by discovering the correlation between development and culture, and by the suitable cultural approach to activate developmental projects or initiatives.

The first hypothesis is that the quality of development and its several outputs depends on the institutional approaches to reinforce culture, heritage, values, and the understanding of the related physical and moral issues (the institutional cultural approach). In order to confirm this hypothesis, Hong Kong was chosen as a case study. The observations commended that; the state must always be enthusiastic about choosing decision-makers with development skills based on those who can expand ideas and translate them into a basis of competitive economic and investment diversity.

The second hypothesis is the material and immaterial sense of the communities' daily culture and heritage depends on the society's ability to activate what it possesses of the realms of community, ideas and objects (the practical cultural approach). To examine this hypothesis, the famous Muslim Quarter of the Chinese city (Xi'an) was chosen as a second case study. This quarter does not stop at serving food, desserts, and beverages according to Muslim law (Halal). It is also a quarter that is studied heavily by university students, researchers, and interested people locally and internationally. This quarter is one of the main tourist attractions in China and one of two most famous attractions of Xi'an area, which are the Terracotta Army and the Old Muslim District. The observation admired the synthesis of the quarter community

¹ Dealing with culture and heritage through the government and private organizations.

² Investigating culture and heritage through the real connection to place history and people life.

³ Utilizing culture and heritage through the educational and research achievements.

⁴ Advancing culture and heritage through the sophisticated philosophical thoughts.

cultural ideas, towards using their religion and culture abilities in producing alternative and innovative economies.

The third hypothesis is that the qualitative encouragement of culture and heritage depend on the interest of the higher education in them (The theoretical cultural approach). To examine this hypothesis, the researcher has participated in the revival initiative of luxurious ancient Chinese silk at the Design School of the Hong Kong Polytechnic University. This initiative is a creative exhibition with the name “One Inch of Kesi Silk, One Ounce of Gold.” The observation endorsed the ability of organizers to promote the artisans to negotiate the ways of silk revival within the community of designers, innovators, and entrepreneurs, which can lead to finding renewable domains that reinforce the role of this historical industry to be included within the creative ideas and the designs of innovative commercial productions.

The fourth hypothesis is that the culture and heritage can participate in treating development challenges (economic diversification, knowledge economy, design policy, etc.) through creative cultural concepts (The conceptual cultural approach). To prove this hypothesis, the Saudi national heritage and cultural festival was chosen as a fourth case study in which the concept of culture-based innovation through scenario can be applied. The scenario is the art of perceiving the future rather than predicting or guessing it. It is a methodology tool in making decisions and putting a future strategy that suits the time and place. It is also a planning tool that helps in building a long-term view within a vague world through understanding today’s alternatives. It also facilitates answering the study's questions through utilizing cognitive thinking level as inputs, the conceptional level as stimuli, and the practical level as products, services, or theories. However, the observation supported that culture-based innovation as a material and immaterial productivity thought to enhancement the festive cultural approaches to be

a cultural catalyst for design based on articulating⁵, translating⁶, transforming⁷, transcending⁸, and collaging's⁹ thinking.

Historically, culture had a strong connection to a nation's civilization and urbanization, as Ibn Khaldoun stated 600 years ago, and as Malek Ben Nabi and Paul Schafer discussed in their writings. Thus, this study approved that Culture-Based Innovation (CBI) can be one of the strategies used in supporting a country's production development, and competitiveness economy. However, Culture-Based Innovation needs creative thinkers who can interact with the cultural explicate and tacit knowledge. Consequently, the culture-based innovation knowledge should be analysing it from an apperception and augmentation vision, instead of, perception and imitation attitude. Subsequently, the analysed knowledge should be synthesizing through design and innovation understanding. On the other hand, the hypotheses of field observations approved that cultural approaches are a very enthusiastic way to monitor a specific cultural phenomenon. Under all these circumstances, the Saudi national cultural and heritage festival has vast opportunity to be expanded into a national project for innovation and design that will generate a new generation of Saudi skills in design and innovation.

To accomplish this hope, the study has been summarized in comprehensive models, these models are: Culture Paradigm Shift Model (CPSM), Culture Bee Innovation Model (CBIM), and Culture Artificial Intelligence Net (CAIN). These models and others have been intensively built for those development decision-makers, educators, and programmers, which their societies are culturally rich and have intensive heritage resources. However, their opportunity is to generate productive cultural projects based on innovation and community participation through the alternative thinking that the researcher tried to be achieved through the methodology of this thesis.

5 Articulation is the influenced perception by tangible properties and visual context. (Ching, 2015)

6 "translation is local and regional meanings of design genes converting into universal forms of aesthetic and functional substance of a new design concept." (Tang Ming Xi, 2014)

7 "transformation is concerned with making changes and variations by computational methods in order to increase the populations of an original design gene." (same above)

8 "transcending is the ultimate objective of generative art and design." (same above)

9 "the process of arranging and overlapping various ingredients to create a more powerful effect than these elements have as separate units." (McCreight, 2013)

LIST OF PUBLICATION, EXHIBITION, AND FILM

Bakhotmah, Fawaz. 2013. "Saudi-China friendship-From relations to innovations." *Design Management Symposium (TIDMS), 2013 IEEE Tsinghua International*. Shenzhen, China.

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Bakhotmah, Fawaz. 2020. "Activating the benefits of *Hajj*¹⁰ and *Umrah*¹¹ by investing their knowledge content in promoting the industry of innovation, design, and entrepreneurship in Saudi Arabia." The International Arab Conference on Quality Assurance in Higher Education (IACQA'2020), Zarqa University, Jordan.

Bakhotmah, Fawaz. 2020. "Taking advantage of the design philosophy of historical mosque complexes in China." 3rd International Conference on Islamic Heritage Architecture and Art (Islamic Heritage 2020), Seville, Spain.

A researcher and documenter member of "One Inch of Kesi Silk, One Ounce of Gold." An Exhibition of China's Kesi Silk Design and Production, by Ming Xi TANG. School of Design, The Hong Kong Polytechnic University, 2013, Hong Kong.

A researcher and documenter member of "Heaven and People in One, Generation by Generation." An Exhibition of Shaanxi Culture and Design Innovation, by Ming Xi TANG. School of Design, The Hong Kong Polytechnic University, 2014, Hong Kong.

A researcher and documenter member of "The Master of Faces." A Documentary film of Chinese Faces Culture Design and Innovation, by Ming Xi TANG. School of Design, The Hong Kong Polytechnic University, 2014, Hong Kong.

An international design team member for the interactive atlas of culture interaction along the silk roads. "The Soul of the Yellow River." A Documentary film of the Stories of Chinese Patchwork Master GAO-FENGLIAN, by Ming Xi TANG. Shaanxi Fashion Engineering University, 2017, Xi'an, China.

Bakhotmah, Fawaz. 2016. "Supporting Innovation in Saudi Arabia, Culture-based Innovation as an urban development framework" The Ph.D. Seminar Winter Session 2016. School of Design, The Hong Kong Polytechnic University, 2016, Hong Kong.

¹⁰ The Hajj is an annual Islamic pilgrimage to Mecca, Saudi Arabia, the holiest city for Muslims, and a mandatory religious duty for Muslims that must be carried out at least once in their lifetime. (Wikipedia, n.d.)

¹¹ The 'Umrah is an Islamic pilgrimage to Mecca, Hijaz, Saudi Arabia, performed by Muslims that can be undertaken at any time of the year, in contrast to the Hajj which has specific dates according to the Islamic lunar calendar. (Wikipedia, n.d.)

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“Praise is to Allah by Whose grace good deeds are completed.” Thanks be to Allah who sent a prophet saying “Whoever takes a path upon which he seeks knowledge, then Allah makes a path to Paradise easy for him. And indeed, the angels lower their wings in approval to the one seeking knowledge. Indeed, forgiveness is sought for the knowledgeable one by whomever is in the heavens and whomever is in the earth, even the fish in the waters. And superiority of the scholar over the worshiper is like the superiority of the moon over the rest of the celestial bodies. Indeed, the scholars are the heirs of the Prophets, and the Prophets do not leave behind Dinar or Dirham. The only legacy of the scholars is knowledge, so whoever takes from it, then he has indeed taken the most able share.” And He also said, “Whoever is not grateful to the people, he is not grateful to Allah.”

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فواز بن عابد بن محمد بالحكمة

لهو

الجمعة 13، رجب 1440

BAKHOTMAH, Fawaz Abid

Hong Kong

Friday, April 19, 2019

IMPORTANT NOTES

1. Most of the biographies in the footnotes have been summarized from "Wikipedia."
2. The study questionnaire is a preliminary guide to people's visions of the National Festival and their views regarding the expansion of the festival into a national project based on innovation and design. It might be necessary to expand this questionnaire for decisive decisions.
3. Ibn Khaldun's "al-ḥaḍara" and "al-'umrān" terms have been discussed from the concept of which the researcher is a specialist in architecture and design, not as a specialist in history or sociology... so it could be a debatable concept. This is a decisive point in the interpretation of Ibn Khaldun's thought.
4. All the models' concepts and design in this thesis belong to the researcher's thought, except those, which have been otherwise mentioned. The letters' abbreviations of these models could be similar to some others; however, these similarities have no relationship with each other.
5. The fourth observational study of "the Saudi National Festival for Heritage and Culture" was conducted in 2016 before the festival organization was transferred from the Ministry of National Guard to the Saudi Ministry of Culture in 2019. However, this transfer of the festival organization to a specialized ministry emphasizes the importance of the researcher's expectations when choosing the topic of this thesis. Hopes it will be an added value for the decision makers of the Ministry of Culture.

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List of Definitions and Abbreviations

Qur'an	Qur'an is the central religious text of Islam, it is word of Allah, it is revealed to the prophet Muhammad during his life at Mecca and Medina. The Quran is used along with the Hadith to interpret sharia law. During prayers, the Quran is only recited in Arabic. Allah will personally protect the Quran from corruption till day of judgment.
Sunnah	The body of social, and legal custom and practice of the Islamic community, based on the teachings, deeds and sayings, silent permissions of the Islamic prophet Muhammad PBUH.
Sharia'a	An Islamic law. It is derived from Qur'an and Sunnah)
PBUH	"Peace Be Upon Him" it is an English translation of "Salaa Allah Ealayh Wasalam" an Arabic statement that Muslims say after mentioning the name of the Prophet Muhammad PBUH.
Ijma'	An Arabic/Islamic term referring to the consensus or agreement of the Muslim scholars on religious issues.
Ijtihad	An Arabic-Islamic legal term meaning "independent reasoning," as opposed to taqlid (imitation).
ad-Dīn	An Arabic terminology for the Islam religion
at-Tārīkh	An Arabic terminology means History
aṣ-ṣanā'i'	An authentic Arabic terminology means, crafts, professions, jobs, etc.
al-'ilm	An Arabic Qur'anic terminology, it has a deep interpretation meaning for science, knowledge, thinking, etc.
al-ḥaḍāra	A scientific term used by Ibn Khaldoun, it originates from the Arab Islamic civilization, it is combining between culture and civilization.
al-'umrān	A scientific term used by Ibn Khaldoun, it originates from the Arab Islamic civilization, it is dealing with culture, civilization and urbanization
Waqf	An Arabic terminology similar to Endowment but under Islamic rule & thought
Janadriyah	Name of a place in Riyadh, the capital city of Saudi Arabia
CBI	Culture-Based Innovation
CPC	Culture Perception Criteria
CAC	Culture Apperception Criteria
CAN	Culture Augmented Net
JIM	Janadriyah Innovation Model
CPSM	Culture Paradigm Shift Model
CBIM	Culture Bee Innovation Model
CAIN	Culture Artificial Intelligence Net

Chapter One

Perception of Culture

- 1.1. Culture as beliefs and values
 - 1.1.1. Holy Resources
 - 1.1.2. Leading Persons
 - 1.1.3. Specific Laws
 - 1.1.4. Nation Developments
- 1.2. Culture as Business and Design
 - 1.2.1. Culture and Business
 - 1.2.2. Culture and Design
- 1.3. Culture as creativity and Innovation
- 1.4. Culture-based innovation; origin and background
- 1.5. Status of Bellagio Mandala Group model?
- 1.6. Noticing Culture-Based Innovation
- 1.7. Exemplifying Culture-Based Innovation
- 1.8. Culture Perception Criteria (CPC)

1.1. Culture as beliefs and values

Culture-based innovation conducts an in-depth analysis of the societal material or immaterial culture, amalgamated with interactive thinking; its value increases culminating in innovative modern products, services, or theories, which are in line with the rise and progress of the society. Therefore, the researcher in this field must be insightful in his or her observation of the civilization and urbanization of his or her research interest, in order to derive the most important values, to detect essential facts of excellence, and to activate the most important ideas of its wise people. Considering that, the researcher belongs to the Arab Islamic environment, an environment that attributes the emergence of Islam to the effects of the Islamic civilization. Therefore, any researcher who belongs to this ancient Islamic civilization can in no way deal with this research in a superficial manner, nor can he or she overlook the enormous impact of the Islamic civilization in previous eras, current times and even into the unknown future, to gain a deeper understanding of the Islamic civilization and its culture. However, it is crucial to recognize the four facts that distinguish Islamic civilization from other, and these are: Qur'an, Sunnah¹², Sharia'a¹³ and the material and immaterial cultural products of Muslim societies. All these four facts are the values that interacted and overlapped with the Muslim individual in general, particularly the Arab individual, indiscriminate of race, language or color. Due to scientific integrity, the researcher must discuss all four facts as they are well-established beliefs in the culture to which he belongs, the culture being that of Saudi Arabia. Without the four facts he cannot build a model to support Saudi Arabia's innovation, for Saudi Arabia's religion is Islam, its constitution is the Qur'an and Sunnah, its law is Islamic Sharia'a and its language is Arabic. Figure 1.1 shows the origins of culture as beliefs and values.

1.1.1. Holy Resources (Qur'an in Islam)

It is the word of Allah revealed to the Prophet of Islam, Mohammed PBUH, to be the Constitution of the Islamic nation and the fundamental component of its religion, civilization, urbanization and language. Mustafa Mahmoud¹⁴ describes

¹² Sunnah, is the body of social, and legal custom and practice of the Islamic community, based on the teachings, deeds and sayings, silent permissions of the Islamic prophet Muhammad PBUH.

¹³ Sharia'a, is Islamic law. It is derived from Qur'an and the Hadith (Sunnah)

¹⁴ Mustafa Mahmoud (1921–2009) was an Egyptian doctor, philosopher, and author. He was trained as a doctor, but later chose a career as a journalist and author, traveling and writing on many subjects. He wrote 89 books in science, philosophy, religion, politics, and society as well as plays, tales, and

Qur'an in his book entitled "Qur'an: a living Creature," saying that "the Qur'anic language is different from that, which we write or speak, for it is perfect and has no-fault, no shortage and no increase." Islamic scholar, Zaghloul El-Naggar¹⁵, and author of "Pages from Scientific and Social Miracles in Qur'an and Sunnah" adds that "the miraculous aspects of Qur'an are as varied as the angles from which a person neutral to Qur'an looks at them" he goes on to mention some of these miraculous aspects: linguistic, Aqidah¹⁶, worshipful, ethical, legislative, historical, educational, psychological, economical, administrative and scientific, he then writes that Qur'an also handles the miracles of the unseen, the description of doomsday, the challenge of mankind and the jinn, and the most important miracle is keeping the Qur'an to the end of this world without being changed or altered, not even one letter of it. If we are to describe the Qur'anic methodology by contemporary science, it is as Abdul Hamid Jendi and Mohammed Fangari say that Qur'an "brought the methodology of meditation to the universe and nature as well as the extrapolation of observations and the causes of things, the search in the earth and sky, and the use of the mind for learning, to reach faith, and rise with the self, behavior and life to the level of piety motivated by fear and hope in Allah." It is noteworthy to state that Abdul Majid al-Zindani¹⁷ author of "Scientific Miracles Rooting in Qur'an and Sunnah" quotes one of the Islamic nations' brilliant minds; Abdullah ibn Abbas, that understanding the Qur'an is accomplished through its interpretation on four levels, namely: the understanding of ordinary people, the interpretation known only by the Arabs from their words, an interpretation known by the Islamic scholars, and the fourth interpretation that is known to no one but Allah Almighty. Musa Al-Jarush¹⁸ personally informed the researcher himself that

travelogues. He is also known for his popular TV program (Science and Faith). He is the founder of a mosque, medical clinic as well as a charitable association, all named after him. They are considered to be one of the leading examples of Islamist social services. (Wikipedia, n.d.)

¹⁵ Zaghloul El Naggar (1933) is an Egyptian geologist, Muslim scholar, and author. The main theme of El-Naggar's books has been science in Quran; his philosophy of science is blended with religion. He left his academic career to become the Chairman of the Committee of Scientific Notions in the Qur'an, Supreme Council of Islamic Affairs, Cairo, Egypt. (Wikipedia, n.d.)

¹⁶ Aqidah, is an Islamic term meaning "creed"

¹⁷ Abdul Majeed al-Zindani (1942) a founder of the Commission on Scientific Signs in the Quran and Sunnah, based in Saudi Arabia.

¹⁸ He is from Jeddah, Saudi Arabia, a gifted in the entire memorization, recitation, interpretation and teaching of the Qur'an.

"the closer the Muslim is to a love of reciting and understanding Qur'an, the deeper his thinking and contemplation is on the physical and moral wonders and miracles of the universe, which do not end until the Day of Resurrection." This undoubtedly proves that Qur'an is a source of inimitability commensurate with the understanding of the knowledgeable, whether an ordinary Muslim or a scholarly Muslim. It is equitable to quote a few Western scholars who spoke in favor of the Qur'an, namely; Maurice Bucaille¹⁹ who stated; "This is a book preserved by the Divine Providence for the human beings, it is a scientific symposium for scientists, a glossary for those seeking language, and a knowledge source for those seeking legislation and laws." Bucaille further states that all the holy books revealed before Qur'an are not worth but one verse of its verses. Barthélémy Stillr indicates that " the Qur'an has been the most beautiful example of the language in which it is revealed, I have not seen anything like it in all eras of religious history of the human world." James Michener says, "Perhaps the Qur'an is the most read book in the world; certainly it is the easiest to memorize and has the most interesting impact on everyday life for those who believe in it; it is not too long as the Old Testament and is written in an elegant style; one of its advantages is that when listening to it, hearts become submissive and grow in belief."

The Qur'an is the word of Allah, and it is the source of the religion of Islam. It is a reference that cannot be dispensed within all sides of the life of any Muslim on earth. The Qur'an for the Muslim individual is the source of light like the sun and not a reflection as the moon. It must be duly noted that the deep-rooted Islamic civilization and its cultural outputs, whether material or immaterial, is part of its religion which comes from the Qur'an which is the word of Allah, a contrast of the West where religion is part of the culture, the source of which is the mind and the human philosophy.

¹⁹ Maurice Bucaille (1920 - 1998) was a French medical doctor and author. In 1973, Bucaille was appointed family physician to King Faisal of Saudi Arabia.

1.1.2. Leading Persons (Prophet Mohammed in Islam)

The famous Islamic preacher Ahmed Deedat²⁰ states Mohammed PBUH²¹ is the greatest prophet for every living Muslim, regardless of educational levels, geographical locations, or political affiliations. He continues to say that Mohammed PBUH is the greatest of Allah's creatures, whom he sent to earth as a mercy for the people." His book delves more in-depth into the reasons why Mohammed PBUH is the greatest prophet. He states that faith in Mohammed PBUH is the greatest for Muslims, for it does not need to be argued, but what about for non-Muslims? He then responds that, it is impressive that fair-minded, intellectual non-Muslims recognize the greatness of Prophet Mohammed PBUH. It is, however, no surprise for Muslims that Mohammed PBUH was chosen as the most significant human being to impact the history of the world, a fact which was proven by the scientist Michael Hart in his famous book *"The 100: A Ranking of the Most Influential Persons in History"* where he said: "This intermingling between religion and the world is unsurpassed which made me believe that Mohammed is the greatest personality that influenced the whole human history." The author adds that Mohammad PBUH, with his modest capabilities, was able to establish and spread the most significant religion of the world and to become a political leader with immense influence. In spite of the undoubted fairness of the author, he did share the same feelings towards Mohammed as the world's Muslims; as Mohammed PBUH beside being an outstanding political leader as indicated by Hart, Muslims also consider him as their leader in all fields, without him there would have been no Islamic civilization and culture, and without him, Islam would not have survived to this day, would never have continued to spread out amongst nations, nor would it have enjoyed its preservation despite the hatred of other nations. In this regard, it is vital to recognize Mohammed PBUH as an inspiring leader through the book entitled *"The leadership of Muhammad"* by the British writer, John Adair²², who

²⁰ Ahmed Hoosen Deedat (1918 – 2005) was a South African writer and public speaker. He was best known as a Muslim missionary, who held numerous inter-religious public debates. He established the IPCI, He was awarded the King Faisal International Prize in 1986.

²¹ PBUH "Peace Be Upon Him" it is an English translation of "Salaa Allah Ealayh Wasalam" an Arabic statement that Muslims say after mentioning the name of the Prophet Muhammad PBUH.

²² John Adair (1934) is a British academic who is a leadership theorist and author of more than forty books on business, military and other forms of leadership.

specializes in leadership sciences and whose books were translated into more than 15 languages, where he concluded that Mohammed PBUH: Applied the Qur'an as a living entity embodied in his life and dealings, committed himself to such responsibility and assumed its duties, took up and taught courage, and trained his followers to confront and act wisely towards risks regardless of the pressure and hardships that they may face. Mohammed PBUH has embodied the goodness, kindness, and compassion that can only be met in a commander enjoying humanitarian qualities, the most important of which is the concept of the leader among people and not of people, so he established the collective sense and the shared values and goals. Mohammed PBUH has activated the splendor of exemplary leadership that can only be achieved by three interrelated essentials – whose crown is humility – and these are: perfect completion of tasks, keeping the values of the group, and meeting individual needs. Mohammed PBUH is characterized by practical wisdom, which is the art of knowing the right thing to be done at the right time and in the right way. He also dealt with trust among individuals and forbade backbiting and gossip, so he became a symbol and a role model in everything. Mohammed PBUH has attracted the love of those who knew him and heard about him, and that because of his love and closeness to his people whom he placed first, as he did not eat, nor did he drink until they had done so first. Mohammed PBUH can, therefore, be described as a commander who needs no introduction; he has dealt with the errors of others with kindness and justice, even in anger, strength and capability, he pardons.

Mohammed was a worldly commander who addressed global affairs and was equally a religious leader handling religious issue. In Islam, Mohammed PBUH is great in all measures, whether religiously, scenically, emotionally, or morally and is described as one who excelled in the means of genius, work and faith. In the words of the great Islamic thinker, Mahmoud Abbas Akkad, Mohammed is a great prophet, a great hero and a great man.²³

²³ Abbās Mahmūd al-Aqqād (1889 – 1964) was an Egyptian journalist, poet and literary critic, and member of the Academy of the Arabic Language in Cairo. His writings cover a broad spectrum, including poetry, criticism, Islam, history, philosophy, politics, biography, science, and Arabic literature.

1.1.3. Specific Laws (Sharia'a in Islam)

It is all the laws laid down by Allah, of ethics, worship, beliefs and transactions to regulate the lives of Muslims between a Muslim and his Allah and the Muslim and his community, in order to be worthy of happiness in this life and the one after, and so that stability and justice prevail on earth. The provisions of Islamic Sharia'a comes from the Holy Qur'an and the Sunnah of our Prophet Mohammed, PBUH, in addition to that there is gaining the consensus of the Muslims (Ijma'²⁴) in the emerging issues that need the Muslims interpretation (Ijtihad²⁵) specialists with regard to matters of religion or life. All the provisions of Islamic law are based on two things:

- A. The full faith in Allah and worship Him alone, the faith that He is The Giver of Life and The Bringer of Death, that He is the Lord and Owner of everything, and the belief in Mohammed PBUH as a messenger.
- B. The commitment of all Muslims to the provisions governing their physical and moral life.

One of the properties of Islamic Sharia'a is that it is divine; it came from the Creator, it is unchangeable, it contains all religious and worldly affairs for all ages and races; it is realistic, moderate, takes people and their circumstances into account and gives everyone his or her right; it is valid for every time and place for all human beings, and it is for the happiness of the individual in this world and the life after. Islamic law came to preserve people's rights and the five essentials, which are: the mind, soul, money, religion, and offspring. Thus, the purpose of Islamic law is human guidance to the worship of Allah, where Allah does not need human worship, but it is the people who need this worship and Allah is bestowed with it. One of the purposes of Sharia'a is the formation of social good in its actions and intentions and committed to the Qur'an and Sunna, informed by Mohammed PBUH. Its purpose is the establishment of a good nation that spreads justice and equality, maintains limits, and does not

²⁴ Ijma' is an Arabic term referring to the consensus or agreement of the Muslim scholars on religious issues.

²⁵ Ijtihad is an Arabic-Islamic legal term meaning "independent reasoning," as opposed to taqlid (imitation).

discriminate between races as they are ultimately brought together by the Islamic faith and Islamic law.

Hamid Rifai, the author of *Partners Not Guardians*, says that, in brief, the Islamic Law or Sharia'a is "The organization of all the affairs of life, the management of the interests of people and the consolidation of justice among them." This is consistent with the pattern of Islam, which calls for building up land and for the establishment of justice; the application of Sharia'a provisions and other issues guaranteeing the best interest of humans, which include: mental security, religious security, health security and moral and social security.

1.1.4. Nation Developments (Al-ḥaḍāra and Al-'umrān of Muslim/Arab)

In order to understand how Islam has formed the world of material and moral things, we have to understand the philosophy of each of the two American Muslim thinkers, Ismail Faruqi²⁶ and his wife Lamya Faruqi²⁷ in their outstanding book *The Cultural Atlas of Islam*, they state that Islam is the essence of Islamic civilization and culture, and that the essence of Islam is monotheism, i.e., affirming that Allah is the Absolute Creator and Supremely Exalted Lord and Master of all beings. These two fundamental principles are obvious, they have never been doubted by those who belong to this civilization, nor have they ever been doubted by those who contributed to it. However, missionaries, orientalist and others who have interpreted Islam in the recent past have cast doubt. Muslims, on the other hand, regardless of the level of their culture, remain confident that the Islamic civilization involves an essence, which can be known, analyzed and described, as monotheism. Monotheism is the principle which gives the Islamic civilization its identity. It connects all its components to form an organic integrated entity which we call civilization. Linking the disparate elements, the essence of civilization provides them with their character. It then re-configures them to become consistent with and supportive of other elements. The substance or essence does not need to change the nature of those elements, but rather transforms them to form a

²⁶ Isma'il Raji al-Faruqi (1921 – 1986), was a Palestinian-American philosopher, widely recognised by his peers as an authority on Islam and comparative religion. He was the founder of the International Institute of Islamic Thought. He wrote over 100 articles for various scholarly journals and magazines in addition to 25 books.

²⁷ Lois Lamya al-Faruqi (1926 – 1986) was an expert on Islamic art and music and was married to Ismail al-Faruqi.

civilization, giving it its new characteristics. The range of this transformation varies between conservative and radical, depending on how far the relationship between the essence and the various elements and their functions is. This relationship has emerged in the minds of Muslims who were following-up on the phenomena of civilization; thus, they took monotheism as a slogan for their most important researches and introduced all the other matters under this slogan. They have deemed monotheism as the most fundamental principle which includes or controls all other principles and in which they found the main resource and initial source that governs all phenomena in the Islamic civilization. Monotheism can be briefly described as the belief and testimony that "There is no Allah but Allah," a phrase which, holds the greatest and richest meanings in Islam as a whole and describes everything about Islam. Sigrid Hunke²⁸, the German thinker and author of "Arab Sun Shines Over the West", says;

To this day, the history of the world, and even the history of literature, arts and science (for Western people and a school student) start very fast with ancient Egypt and Babylon, then expands and branches into Greece and Rome, swiftly passing into Byzantium, and moving into the Christian middle ages and culminating in the Modern Ages... as Arabs have pioneered other people around the world for 750 years, carrying the torch of culture for a lengthy period that exceeded the golden age of the Greeks by at least twofold, more than any other people... how many people know of such a thing? and whom talks about it?" (Hunke 1993 :pp. 11-12)

However, Culture-based innovation needs to understand its essence and excellence, to continue its innovations and products. Sigrid says: "The prosperity and renaissance of the West only began when it started political, scientific and commercial contact with the Arabs, waking up European school of thought from its centuries-long slumber, awakening it to the dawn of Arab arts, literature, and sciences to become a richer, more beautiful, healthier and happier society." (Hunke, 1993)

²⁸ Sigrid Hunke (1913 – 1999) was a German philosopher and author. She is known for her work in the field of religious studies.

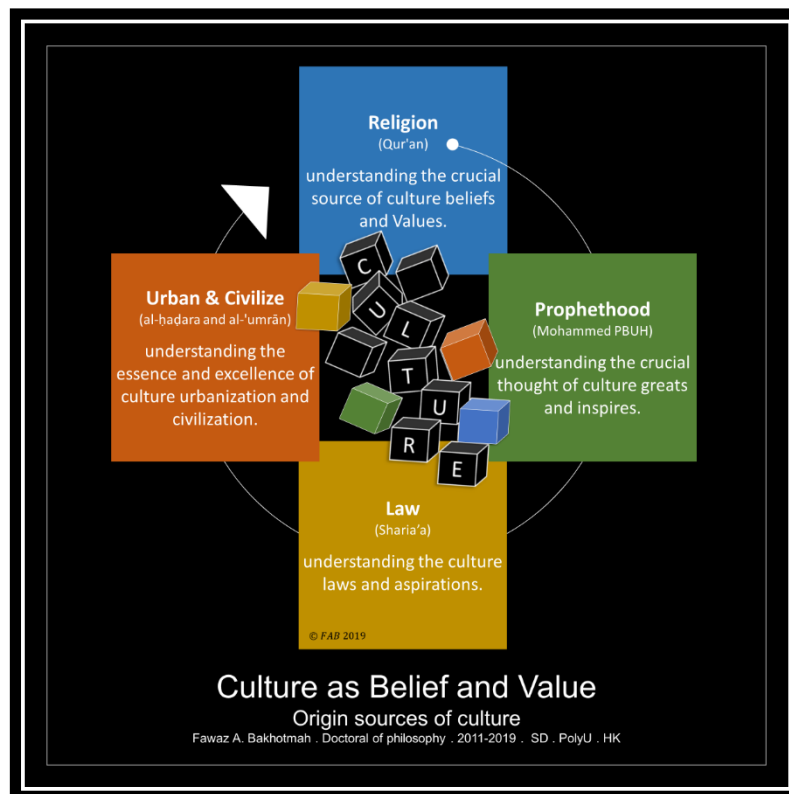


Figure 1.1 shows the origins of culture as belief and value. To understand the Islamic culture, we must recognize the four pillars that characterize it from other cultures, and these are: the Qur'an, Sunnah, Sharia'a, and civilization. All these four pillars are the values that interacted and overlapped with the Muslim individual in general and the Arab-Muslim individual in particular — concept: Fawaz A. Bakhotmah.

1.2. Culture as Business and Design

1.2.1. Culture and Business

There are three levels influenced by the culture of society in the fields of economy and business. The first level is the relations between individuals through communication, meeting and negotiation. The success of this level depends on the extent of the individual's knowledge of the cultural influence over language, cognition, behavior, customs and traditions. The second level is the relations between institutions. The relations are usually through contracts, projects and merges. Their success depends on the importance of the institution's knowledge of the cultural influence over its system of making decisions, building relations and creating relationships. The third level is the communication between the institutions and their clients through marketing, advertisement, after-sale services and considering the suggestions to develop products and services. The ignorance of the importance of cultural influence over all these matters or part of them is what is known as "Ethnocentrism" which is

the belief that one's own way of doing things is superior to that of others (or) evaluation of other cultures according to

preconceptions originating in the standards and customs of one's own culture (or) A belief in the superiority of one's own ethnic group or culture; often results in disregard or contempt for the culture of other countries. (Rugman, 2008, pp. 133-134)

“Ethnocentrism” often creates multiple problems and is the cause of human life and material possessions. It is also a major obstacle to the management of large business activities, thus hindering their expansion in the world. Therefore, the important challenge for entrepreneurs and managers is to respect religions, cultures and gain knowledge of their similarities to be appreciated or differentiated, and to be adapted or appropriated accordingly. Thus, companies and products or services succeed in different markets. From this point of view, the study of culture is central to the system of economic progress and globalization. This importance can be discerned from the definition of culture in the book *The Global Business Today* by C. Hill and W. Requejo who concluded that culture in economics and business is: "a system of values and norms that are shared among a group of people and that when taken together constitute a design for living" (Requejo, 2011, p. 120). In this definition, we can infer three cultural foundations having a significant influence on business and economic dealings and global competitiveness.

1.2.1.1. Values and norms

Values and norms are key components of culture and society as we know it. Values are the ideals that the society believes to be correct, rights and justice that people are always willing to sustain and never distort nor question their importance or underestimate them. Norms are the principles and orientations that govern and regulate the actions and behaviors of individuals in most social aspects. They are divided into two levels: the first level, Folkways; these are the customs and traditions of the physical and moral routines of the societal daily life; namely clothing, food, celebrations and means of communication among people. This level does not necessitate strictness, nor does it warrant punishment should individuals not commit to its elements or strict applications. The reason is that it has varying and numerous aspects, which are determined by regions in one state. The

second level, Mores; these are the sets of fundamental principles that cannot be relinquished or manipulated. The source of these Mores often originates from the values and morals that are urged by religions and legislations. Therefore, they must be strictly adhered to, so as to create discipline in the fields of society as a whole. Thus, their importance and societal commitment render them a necessity above Folkways.

1.2.1.2. A group of people

A group of people is a community that shares a common set of values and norms based on religious or cultural data. An example is a study conducted in 2011 by (Sallwa Al-Khatib) on the culture of the sons of Saudi society and whether there is a national figure linking them? The researcher concluded that there is a national kind of characteristic distinguishing the Saudi people from other societies. One of the most important features in the Saudi personality is the commitment to religion and the preservation of customs and traditions. The values of work, such as organization, design, responsibility, will, self-expression, control, ambition, etc., are adhered to in an orderly fashion. Thereafter order, innovation, creativity, and somewhat inclination to imitation and simulation follow. This indicates that the Saudi culture has a different effect; its peak is seen in religion, customs and traditions, and its influence is greatly reduced in the promotion of production and innovative work, which is contrary to the urges of religious values and Arab Islamic civilization.

1.2.1.3. Design for living

Design for living is the development and progress that societies seek to have a global competitive presence and an independent identity through the building of a group of people who are scientifically, economically, industrially and politically capable, relying on their own tangible and moral outcomes and values. These are continuously yielded from six basic pillars: Religion, Education, Language, Social structure, Political philosophy, and Economic philosophy.

We conclude from the above that the relationship of culture to man has no limits. It is a strong relationship that extends even to the world of economy, commerce, and business. This argument is based on numerous researches,

studies, and theories that began to emerge from the last mid-century and are still continuously being developed through several approaches and ideas. Figure 1.2 shows the moralities and fidelities of culture as a creative source for business competitiveness.

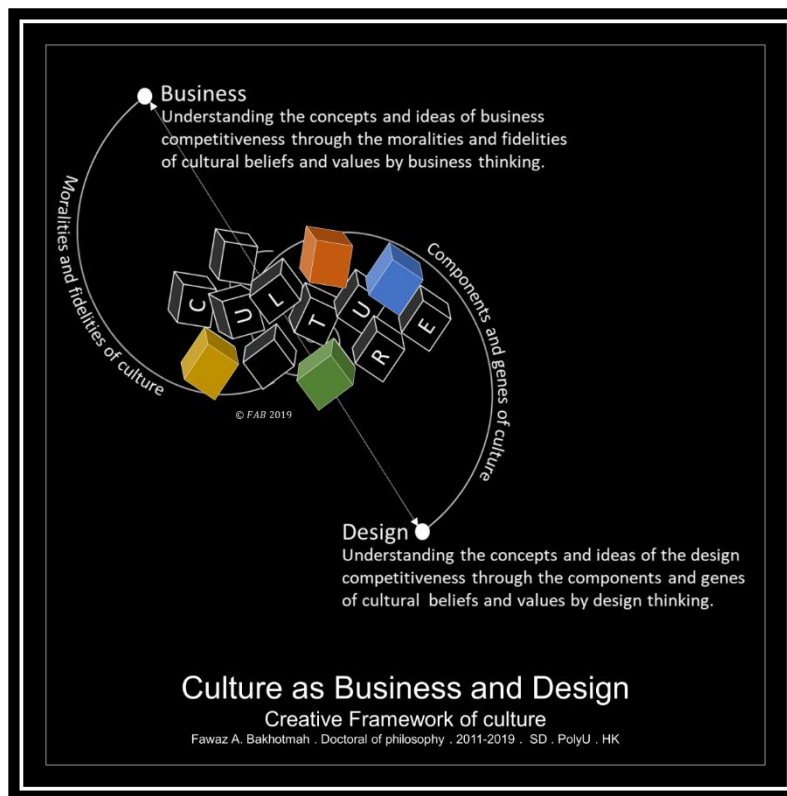


Figure 1.2 shows the culture that could be a creative framework to create a competitive business and design by multi-thinking — concept: Fawaz A. Bakhotmah..

1.2.2. Culture and Design

In the previous topic, we tackled the importance of culture in the field of economics, finance, and business. However, we will now explain the importance of a reciprocal relationship between design and culture. The design itself is a flexible culture of thought and a culture of democratic dialogue by individuals or groups. The main purpose of which is to generate concepts and ideas, transformed through design into material or service products, or placed in scientific or practical theories. The design goes beyond aesthetics and style, as George Marcus explains in his book what is design today? He says:

Thinking about design today means thinking beyond aesthetics and style. However, it means recognizing the complex issues of production, technology, responsibility, and individuality and the messages that underlie our products and

their branding. In thinking about design, we confront the divergent values that we find in society today. As times change, design also changes, and some of the attitudes and trends that typified an era of optimism and consumption also have begun to change. Where design will go remains to be seen, and while many of the same questions we have asked about design today will be asked again tomorrow, I we have no idea whether the answers will be the same or completely different. (Marcus, 2002, p. 138)

Moreover, design co-exists with human, but of course, not in his methodology used in this age. It has evolved through the ages when used in different ways by various civilizations in the field of construction and reconstruction, urban planning, industries, crafts, productions, etc. design, as a discipline, is, to some extent, is modern and includes many disciplines that are constantly evolving whenever necessary. Silje Friis, in her Ph.D.²⁹ thesis, stated that the disciplines of design and its complex branches might reach up to more than seven hundred. She says:

"According to Terence Love, "the field of design consists of at least 750 subfields, each with distinctive communities of practice, research literatures, and bodies of knowledge".
(Friis, 2006, p. 44)

Innovation cannot work without design because design is a tool that transforms innovations into realistic products or services, and thus affects their composition and final configuration. There are four important foundations in the sustainability of innovation, something that marks the most important areas of our modern era. For the researcher, all these foundations have a direct or indirect relationship to design: 1) Forming an enthusiastic generation that constantly seeks to generate new ideas, (2) Spreading the culture of design and making it into everyday life; and (3) Providing an attractive and beautiful environment that freely embraces, (4) transparently supports and supervises ideas and initiatives.

²⁹ Silje Alberthe Kamille Friis, Her thesis title is "Conscious Design Practice as a Strategic Tool" (2006)

(Gaynor, 2002) To delve deeper into this issue, we will discuss the notion of design as a concept through two themes, design as innovation and design as a culture:

1.2.2.1. Design as an innovational concept

Design is much deeper than merely being configurations and formations, which are based on aesthetics and styles. It is an integrated system of thinking, behavior, and practice. Thinking reflects the ability to be creative. For a person to be creative, he or she must think differently, "To be creative, people have to think differently." (Stamm, 2008, p. 3) The behavior reflects the ability to innovate. For a person to innovate, he or she must behave differently, "To be innovative, people have to behave differently" [8, p. 3]. The practice is a mirror that reflects man's skills of performance and production based on thought and behavior. That is to say, that they are based on the extent of enjoyable creativity and innovation. Any person, if not creative in his or her way of thinking and different in the completion of his or her work, will be met with difficulty to be good at the practice within the field of design, in other words being a good designer. A good designer has two qualities; firstly, the sustainability of the ability to innovate and change to the best, secondly is the ability to encourage others to innovate and change for the better, which goes hand in hand with the values of their religions and cultures and accompanied with modern-day developments. John Heskett says:

Design is one of the basic characteristics of what it is to be human, and an essential determinant of the quality of human life. It affects everyone in every detail of every aspect of what they do throughout each day" based on that, Heskett, raises a major question for designers, which is "how to enable people from different cultures to navigate the problems of change. In other words, business should respond to different cultural needs in ways that improve lives: by designing products and services that are accessible, appropriate, understandable, and pleasurable, in ways that they can be absorbed into their patterns of life. (Heskett, 2002)

Here, Heskett not only describes design as a system capable of activating creativity and innovation towards complex matters of production, technology, services, trademarks, etc., he also calls for culture to be a key element with design to create a better life that brings the diverse values and views of cultures and societies together. Some may wonder why Heskett addressed this particular statement to designers. Perhaps Heskett is aware that design science and its designers are capable of keeping up with a change that is consistent with each time and place, not only for adaptation but also for creativity and innovation. This may also explain the emergence of different schools and theories of design throughout history. Heskett believed that a good designer is the one who creatively discusses this topic to come to a solution with an innovation commensurate with the various data of life that culturally differs throughout the ages. In his book *What is Design Today?* George Marcus concurs with this belief and goes on to say:

"Where design will go remains to be seen, and while many of the same questions we have asked about design today will be asked again tomorrow, we have no idea whether the answers will be the same or completely different" (Marcus, 2002, p. 138)

The above gives high importance to design as a concept of change and innovation, and it is consistent with the importance of design in societies such as thinking, behavior, and practice.

1.2.2.2. Design as a cultural concept

In her book *An Introduction to Design and Culture*, Penny Sparke³⁰ pointed to the relationship between culture and design and stated that the combination of the two brings a great deal of excitement and enthusiasm:

Interestingly, like 'design,' the word 'culture' also has a verbal derivation, linked to the idea of 'growing' or 'nurturing.' In recent times, the word has been transformed into a noun denoting the result of the above activity. Putting the two words, design and culture, together immediately compounds

³⁰ Penny Sparke, a British writer and academic specializing in the history of design.

their complexities and they impact upon each other in interesting ways. (Sparke, 2013)

In fact, this relationship between culture and design has existed from the dawn of creation; however, the strength or weakness of this relationship is determined by the ability of societies to activate or weaken it. Nonetheless, what is of concern in this context is the short answer to a pertinent question that may trigger the mind: how do we combine design and culture to produce competitive modern products that carry the spirit of peoples' cultures and heritage, or the spirit of creative integration between the two based on mutual respect for values, customs, and traditions?

To answer this question, firstly, it is important to note that dealing with culture as input to diverse productive ideas is a kind of creativity before it is an economy, innovation, or design. The process of creativity that we mean here is the process that uses culture as a force and the forming methodology of cultural data or the importance of the cultural activity, or the re-formulation of culture and heritage to be within the spirit of the times:

creative is used to describe three kinds of things: a person, a process or activity, or a product, whether it is an idea in someone's mind or an observable performance or artifact.

(Anon., 2014, p. 6)

In order to create culture as an input to creative ideas through the above orientations, we should not deal with them naively or with a simple general view. We need to savour them with a deep analytical thought that begins with an overview that transforms into an innovative view based on the disassembly and creative structuring of each part of culture or heritage. In this respect, I state what Professor Paolo Vincenzo Genovese³¹ said in a public lecture of the Architecture College at the Chinese University of Hong Kong, when asked about his latest interest in architecture and mathematics, he replied that he was very interested in the Islamic architectural formations. He begins by saying that it is no more than a popular historical

³¹ Paolo V. Genovese, an Italian architect, Professor, Doctoral Supervisor, Tianjin University, China.

art, however, when you focus on and explore it deeply, through its diversity and geometrical overlap and its relation to the spaces it occupies and the spaces in which it exists, the interested person may have a deep sense of excitement from looking at these extraordinary formations and designs. However, they were rather based on theories, relations, in addition to mathematical, artistic, cultural and religious concepts that need to be explored in creative ways leading us to new ideas that can be coined within the jargon of architectural or innovative design consistent with the rhythm of the times. (Genovese, 13 March 2014)

This dimension in the activation of culture or heritage cannot be dealt with comprehensively without delving into the disciplines of culture and its contents and definitions. There are, however, numerous studies, theories and mechanisms on understanding how to deal with culture. But, they generally do not address the culture and heritage from the perspective of creativity, innovation, or design. And if there are any who do, we find them here and there in researches, books and lectures that do not necessarily have cultural or heritage titles, as Genovese's point of view on Islamic Art in the title of a lecture of a modern technical subject that did not suggest that it will contain in-depth information on Islamic culture and heritage.

From those as mentioned above, it is evident that two approaches could be invested to relate design to culture: 1) to encourage the thinking of our generations to interact with the contents of the disciplines they are interested in as if they have concepts that can be linked to culture and heritage, generating new ideas, which will help them to develop their exploratory abilities based on the creativity methodology that we previously discussed. 2) To deal with culture as a set of inputs that have to do with daily life in all its details, specialties, orientations, values, etc. In this case, we encourage the thinking of our generations to interact with the components of daily life - not only specialization - as if these components include cultural and heritage concepts that can be enhanced through multiple disciplines, to come out with material and non-material products based on creativity, innovation and design. In fact, the first orientation is personal, linking the individual to culture and heritage, while the second

approach is an institutional orientation that connects society with culture and heritage. The first approach may be within the scope of personal initiatives at the level of the teacher, the curriculum, or the school, etc. The second approach must be within the scope of government development initiatives at the level of education, sports, health, economy, etc., as is the case in Hong Kong, for example³².

Hence, this study focuses on the second approach for two reasons. Firstly, the issue it tackles is a national matter related to institutional development through innovation and design. It is therefore directed at decision-makers who need to concretize innovation, creativity and design within their own development, and have a cultural and heritage resources. On the other hand, the results of this study will help to concretize the first approach of personal initiatives to be a complementary and supportive tributary of the comprehensive system of development based on culture and innovation. Secondly, it has a good philosophical basis in Paul Schafer's studies, proposing that culture and cultures should be open as innovative alternatives to world development rather than current economic systems, because of which many societies face many serious problems. Schafer says:

They are: the institutional approach; the practical approach; the theoretical approach; and the conceptual approach. While each approach has its strengths and shortcomings, each also contributes to broadening and deepening our understanding of culture as a concept. (Schafer, 1998, p. 14)

There is still an important element in this issue, which is the historical context in dealing with culture, on the one hand, innovation and design on the other. Therefore, one of the major parts of this study will be devoted to exploring this area, which has very important conclusions. Kjetil Fallan

³² Hong Kong Education provides three books about Design and Technology and three additional books about Home Economics. The researcher found that there are some topics which have cultural concepts. However, this government initiative creates a good link between: culture and heritage and on the other hand design and economy.

reviewed this dimension³³ in his book *Design History*, where he pointed out that:

design culture is not elite culture, but everyday culture, and it is best explored through historical analysis. Perhaps the most interesting aspect of design as a field of historical inquiry is its many guises of inherent ambiguity, its essential tension between ideology and practice, between mind and matter, between culture and commerce, between production and consumption, between utility and symbol, between tradition and innovation, between the real and the ideal." (Fallan, 2010)

1.3. Culture as Creativity and Innovation

In the two previous topics, we briefly reviewed the close relationship between culture and the world of finance and business, and between culture and design and its association with creativity and innovation. The reader can conclude from these and similar relationships that there tends to be a strong tendency to call attention to the religions, cultures, and heritage. This importance will be automatically doubled with the progress of knowledge, technical and economic aspects in the world today. In the present day, it is evident that the strong cultures of some powerful countries have transcended the societal boundaries to influence the cultures of other societies regardless of distance. Countries such as Japan, China, and America, as an example, see the impact of their cultures in many societies more than the impact of the culture of society itself. This leads us to conclude that the interest in cultures and their activation and uses within their development strategies can impact other societies with weaker cultures or cultures that are not activated in a manner that corresponds to progress and globalization. With the incredible knowledge and technological progress of global civilization that began at the end of the last century and continues to accelerate in an unbelievable speed in the 21st century, it is evident that there is a vast amount of knowledge and information available to all people through different kinds of media. This has shrunk the size of the world to that of a small village that controls the forces of globalization

³³ Kjetil Fallan is a Norwegian historian specializing in 20th century industrial design and material culture.

hidden within the new cultural principles aimed at hegemony in all areas. This has forced older civilizations that have enjoyed long and unwavering historical relevance to now prove their abilities to preserve their values and identities by exploiting the twenty-first-century innovative cognitive media, with an amazing quantity of information and rapid technological progress. The most important thing is to make knowledge and information accessible to everyone around the globe and to participate and interact with them without hindrance due to place or time. This unprecedented revolution brought the concept of culture to a new world, a world full of creative ideas, not only at the level of research studies and theories but also at the level of innovation, invention, and design. This revolution has converted the culture towards the totalitarian interaction of lives on both moral and physical sides to turn into pacts that dive towards competitive and diverse material outputs with values and identities that link the heritage of the past with the present and the future. Therefore, there are multiple outputs we are beginning to see through the recent trends in the activation of culture and heritage in different communities. These are the so-called social innovation, the new ideas that intersect with the needs of society and result in levels of cooperation or new social relations. In other words, useful innovations for the community, which simultaneously help the community to sharpen the momentum towards joint action. The modern approach is also called Design Anthropology, which is the transition from Anthropology from theoretical and exploratory knowledge to practical and productive applications based on innovation and design solutions. In this sense, those who practice this approach are capable of creativity, innovation and design through a sense of dynamic conditions and changes, social relations and ramifications, and knowledge of people's abilities to enhance their daily environment in all fields. There are other tendencies that are used to push thinking towards more creativity, innovation and design, among them are; User-centered design, Activity-centered design, Process-centered design, Community-centered Design, design-given characteristics, service-oriented design, Experience-based design, design-led innovation process, Design-orienting Scenarios, User–service Interaction, and Human-made creation. For the importance of activating cultures and heritage in keeping the diversity of peoples and their values to meet the global challenges that continue to increase daily, focus on community-related initiatives

has become crucial. Culture-Based Innovation was also chosen as one of the initiatives that can be used in this field.

1.4. Culture-Based Innovation; Origin and Background

Based on the activation of culture and heritage that has been summarized above, an initiative launched in 2011 by an interdisciplinary group of specialists led by Elizabeth Tunstall³⁴. The group was named Bellagio Mandala Group of Culture-Based Innovation; it was a global innovation meeting at the Rockefeller Foundation's Bellagio Center in Italy in 2011. The group established a new approach to innovation that uses heritage and traditional knowledge to drive transformative innovations that benefit communities that experience social economic and cultural distress. While, this trend enhancing the growing interest of governments that are focusing more than ever on protecting and expanding their tangible and intangible cultural heritage. Therefore, "the primary challenge faced by businesses is how to positively and effectively apply this concept in practice" (China Bridge, 2013) The Mandala Group has defined their initiative as following:

Cultures-Based Innovation is the use of tangible and intangible cultural heritage to drive irreversible changes in peoples' attitudes, behaviors, and/or values that directly benefit communities under social and environmental distress.

The initiative works with communities to activate their beliefs, values of culture and heritage assets to be economic products, high-end services, or scientific theories by advancing development factors, imagining and thinking creatively, in activating the implementation of the future of ethical life. This means, "change must happen instinctively from society to society supported by innovation, consulting and educational institutions to help communities measure their impact through their resources and networks." (Culture-Based Innovation, 2014) The following five levels illustrate the concept of the applicable model of cultural innovation: figure 1.3 shows the model of Culture-Based Innovation (CBI) based on the thought of Bellagio Mandala Group.

³⁴ Elizabeth Tunstall, a specialist in Design Anthropology. She is a dean of the Faculty of Design at Ontario College of Art and Design (OCAD)

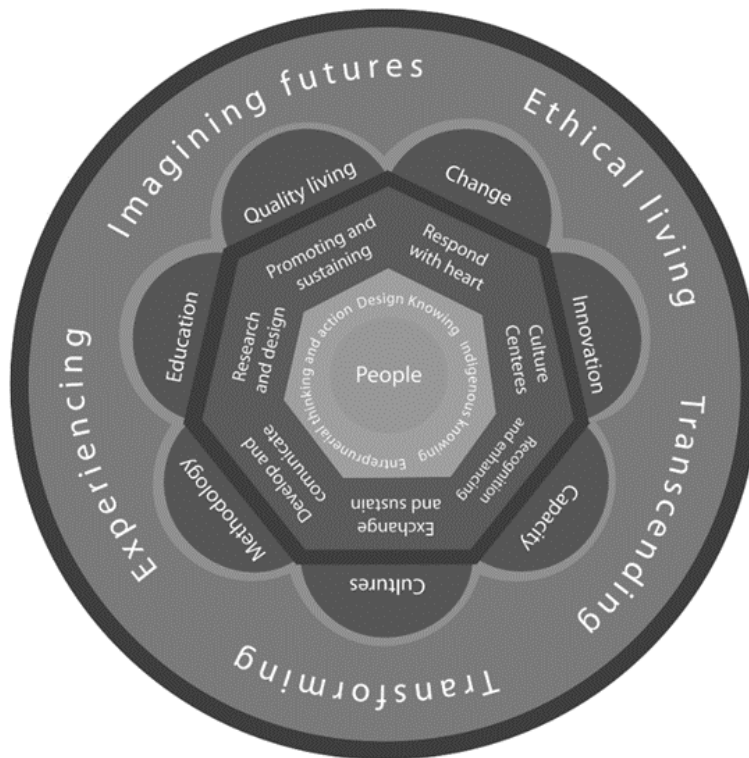


Figure 1.3 Model of Bellagio Mandala Group of Culture-Based Innovation 2010
Source: Prof. TANG Ming Xi, SD, PolyU, HK

1.4.1. P.E.O.P.L.E layer

The first level of this initiative is its center and essence. It refers to P.E.O.P.L.E, which is the abbreviation of Peoples, Environments, Opportunities, Priorities, Languages, and Experiences. This data serves as a comprehensive approach to understanding culture and heritage themes and enhancing their importance from multiple sources. Hence, we can deduce that the orientation here is a P.E.O.P.L.E-centered approach and not a human-centered approach.

1.4.2. Knowledge layer

The second level deals with the development of knowledge that we need in activating P.E.O.P.L.E by thinking out of the box that converts the outputs of this activation into inputs to generate innovations ... (1) design knowing, (2) indigenous knowing, and (3) entrepreneurial action.

1.4.3. Approaches layer

This layer assumes that seven entries that participate in the CBI can proceed to reach clear goals and programs of action. These approaches can be divided into three levels: The first level consists of two entries that

urge participants to (1) sense the context of society: religion, values, customs, and identity; (2) respect their customs and traditions; and understand their everyday ways of coping with problems and develop solutions for them. The second level consists of three entries that urge participants to define their goals and tasks, such as (3) to promote something and create better communication, (4) to develop and support important issues, to organize new procedures, or (5) to conduct scientific research or design new products. The third level consists of two inputs that urge participants to have an attitude that supports culture sustainability, including (6) the creation of ideas for exchange between one culture and multiple cultures while facilitating sustainable communication among them, (7) building innovative cultural centers based on production and marketing.

1.4.4. Target layer

This layer urges participants in the initiative to have their goals and programs of work they seek through the seven entries. These are to be aligned and focused in a manner that permits them to have a clear impact on domains such as (1) Wellness, (2) Capacity Building, (3) Change, (4) Education, (5) Methodology, (6) Innovation, and (7) Cultural Values.

1.4.5. Production layer

This layer shows the identity of the material or moral outputs of the initiative and the methods of its formation through four scenarios that have a great relationship with design thinking: Transcending, Transforming, Imagining Futures, and Living Ethically. This will be explained at a later stage in this thesis.

1.5. Status of Bellagio Mandala Group model?

This initiative, despite its scientific importance and social humanity, is to activate the cultural and heritage resources of societies through creative ideas, bold innovations, and diverse designs that enrich progress and limit the loss of values and identity resulting from accelerating globalization. But it is still far from the effective scientific and practical arena as it failed as a form of applied medical research and studies as well as that of products and services. The practical model of the initiative, which is outlined above, within a limited scope of application, does not exceed some of the ideas of a few of the Initiative's members, and with the

establishment of some scientific meetings, it is difficult to gain access to their deliberations and research.

The reason for the non-proliferation of this initiative and its model may be the fact that it has not been officially published and is still being tested by CBI members through some scientific research and practical applications. The researcher met with Elizabeth Tunstall (2012) in Hong Kong when she visited Professor Tang Ming Xi, the principal supervisor of this thesis, who is also a member and faculty member of the School of Design at the Hong Kong Polytechnic University. The visit was part of Tunstall's tour on discussing some of the initiative-based projects and the depth of the initiative's implementation. These projects are: "The digital technologies through image scanning and touch interfaces," examining the Chinese language and its development, as well as "The Chinese design guidelines from the 1930s and the first articulations of a nationalist Chinese approach to design and the work of The Arts Research Center for the Olympic Games", which is one of the first projects to support Chinese culture-based innovations and designs in the identification of national brand concepts. These projects belong to the China Central Academy of Fine Arts under the supervision of ZHOU Bo. Another culture-based innovation project is, the Cathy HUANG Project, which primarily aims to serve older rural patients better so that the "one-child" generation is not overly burdened with their parents' health care. Among the research projects is TANG Ming Xi's advanced studies and research, conducted at the doctoral students' level at the Hong Kong Polytechnic University, includes "the use of computer-aided drawing and high fidelity prototyping of Yunnan folk instruments and weaving looms to produce small prototypes, thus adding new products and markets to the 1000-year-old Kesi Silk industry". This latest project highlights the importance of the initiative in activating the important heritage craftsmanship. The hand-woven double-sided silk weave is the craft of royalty and luxurious products, which has been China's famous craft for thousands of years. This profession, which is socially and economically profitable and dazzling in its art and design, is endangered despite the huge population of China due to the social and demographic changes and the reluctance of young people to specialize and practice what needs to be developed creative thinking through innovations and designs, thus creating a sustainable market for them. This project will be reviewed in greater detail in one

case study of this thesis. One of the meetings held on the initiative, that I did not find enough information about, includes a "Culture-Based Innovation: Indigenous Knowledge and Creative Initiatives," it was a meeting between a group of leading designers, artisans, anthropologists, researchers and business innovation consultants, and some indigenous educators From Northern, Central, Southern China and the Caribbean. This meeting aimed to explore how cultural knowledge and indigenous people can lead to creative and innovative initiatives to address social issues. The seminar aimed to expand the network of ideas, research studies, and practice in the culture-based innovation of the Americas and to demonstrate the global importance of culture-based innovation as an approach that promotes sustainability in its areas related to innovation and design while expanding examples of cultural innovation in solutions to social and economic needs in the context of daily life, with a view on how to support the network of culture-based innovation and identify the resources it needs. There were also, interesting topics that have an intellectual relation to the culture-based innovation, such as the lecture by Elaine Ann³⁵ on "What can Bruce Lee teach us about innovation for Hong Kong and China" in the Business School of the Chinese University of Hong Kong.

1.6. Noticing Culture-Based Innovation

This topic is one of the most important matters of this thesis. It took deep exploration, research, focus and observation to imagine the concept of culture and heritage as the generators of innovation based on what was explained in the previous topics. Therefore, the researcher does not exaggerate when he says that the concept of Culture-Based Innovation cannot be imagined or applied, if not strengthened by the observation of some real projects to understand the cultural philosophies that formed them. However, because it is difficult to find some projects analyzed on this basis. The researcher was then required to take the initiative to explain his point of view through some real projects that can be a conceptual creation of how to build innovative projects based on culture, heritage and components. This is intending to pave the way for various studies specializing in enhancing the importance of culture-based innovation and creating the scientific and practical spaces towards the use of culture and heritage as competitive

³⁵ Elaine Ann, a Chinese designer, Founder and CEO of Kaizor Innovation, Hong Kong.

production lines. In order to reach a wide range of projects, he began to use the noticing approach. The “notice” as Max Bazerman³⁶ describes:

someone with a good eye, especially for human behavior... recognizes talent and sees opportunities that others miss... less likely than most to be blinded by what they want the data to be and more open to what the data actually suggests... to think multiple steps ahead, they have the capacity to identify when change is needed and then make the change
(Bazerman, 2014, p. 181)

The observations sought by the researcher to form part of the project that should be studied consist of three standards:

1. Cultural perception (1st impression³⁷), the availability of the realistic dimension of culture or heritage, or both in the material and moral concepts of the chosen projects.
2. Think differently (2nd impression³⁸), the success of the business or entrepreneurship ideas of the chosen projects with the current and future progress.
3. Behave differently (3rd impression³⁹), the extent to which design thinking specialties benefit from transforming the outputs of the first and the second standard into products, services, or theories.

It should be noted that these standards are relative criteria among researchers, which may be generated from cultural ideas and concepts that give added value to projects for the researcher, therefore not necessarily applicable to another researcher. But knowledge of the three previous topics discussed will certainly give a person a great ability to observe, fantasize and explore religious, cultural and heritage values in all aspects of everyday life, regardless of the degree of agreement or difference between researchers. Figure 1.4 shows the author's

³⁶ Max Hal Bazerman (1955) is an author and academic who specializes in business psychology. He is the Jesse Isidor Straus Professor of Business Administration at Harvard Business School.

³⁷ A general evaluation; the person's impression delivered something emotional but did not offer any interpretation. (Bakhotmah, 1998)

³⁸ A specific evaluation; the person's impression delivered something specific determining an interpretation. (Bakhotmah, 1998)

³⁹ A new application; the person's impression delivered a detail scenario and new implementation can be found. (Bakhotmah, 1998)

perception through the noticing methodology to understand the creative and innovative cultural philosophy that formed some projects.

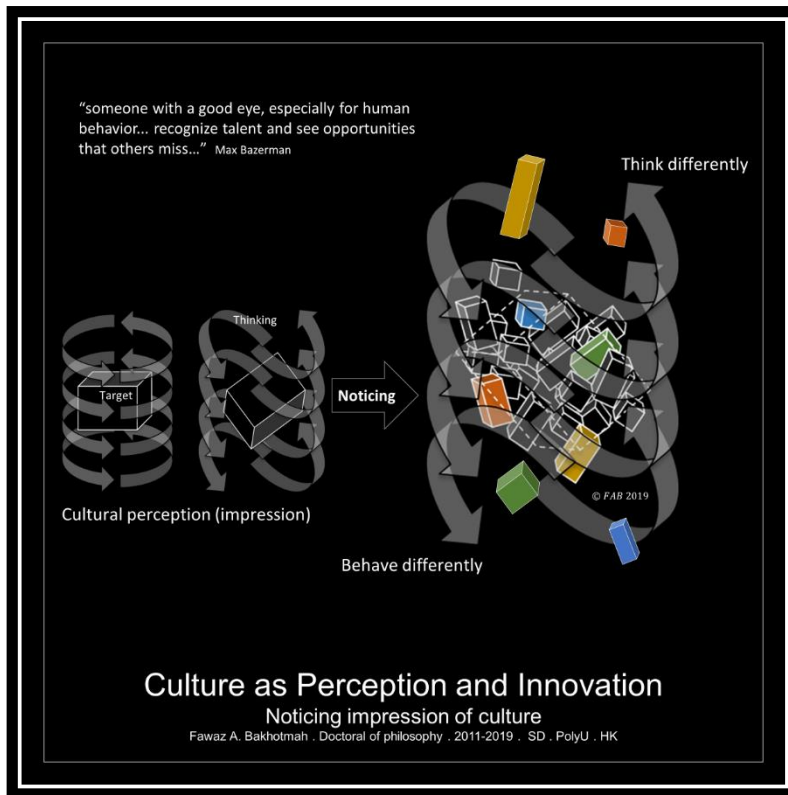


Figure 1.4 The author's noticing methodology to understand the creative and innovative cultural philosophy that formed some projects. concept: Fawaz A. Bakhotmah.

1.7. Exemplifying Culture-Based Innovation

Here the thesis reviews twenty-seven projects analyzed by the researcher through the noticing methodology that was mentioned in the previous topic. The important conclusion in this analysis is that there are many cultural philosophies, which formed these works; thought, culture and business, culture and design, and culture and the daily life of people, which emphasizes the importance of the relationship of culture with multiple disciplines. Therefore, those who are interested in culture-based innovation need broader knowledge on the topics previously mentioned. It will be noted that in most of the examples, originality is combined with contemporary concepts that reflect the wonderful honesty of the masters, designers or artists, etc., which they achieved through the full understanding of cultural and heritage values without distortion or disruption. The most important benefit we draw from these examples is the importance of the method of noticing through our perception. Without conscious awareness of culture and heritage, it is not possible to engage in cultural-based innovation. The following are ten projects

out of twenty-seven that have been studied to express the importance of noticing in culture. Figure 1.5 shows the twenty-seven projects analyzed through the noticing methodology.

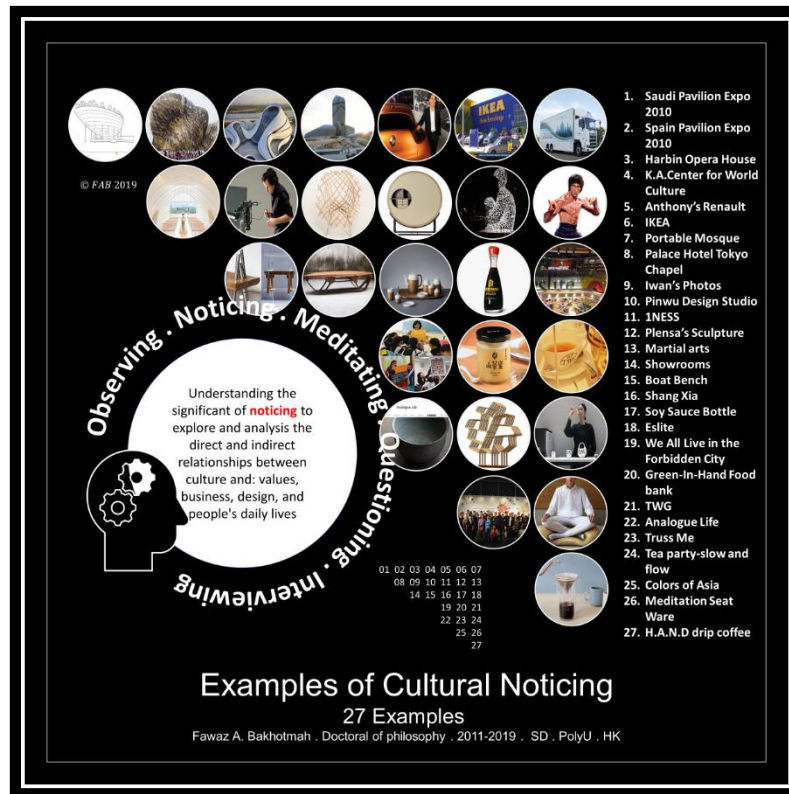


Figure 1.5 The twenty-seven projects analyzed through the noticing methodology. To understand the significance of noticing to explore and analyze the direct and indirect relationships between culture and: values, business, design, and people's daily lives. Source: concept: Fawaz A. Bakhotmah..

1.7.1. Culture motivates wisdom (Saudi Pavilion Expo 2010)

The organizers of the 2010 Expo held in Shanghai were keen to keep the Saudi Pavilion and crown it as one of the best pavilions that ever existed, and after that, reopen it for visitors after the expo was officially over. In appreciation of this position, Saudi Arabia has presented its pavilion with all its contents to the host country, China. (Al-Eqtisadiyah Newspaper, n.d.) The Saudi Pavilion continued to receive visitors for six years; statistically the visitors are said to have been more than seven million people in total. (Wikipedia, n.d.) One begs the question, what does it mean that China, one of the world's largest commercial capitals, chose to keep the Saudi pavilion? Undoubtedly, the Saudi Pavilion has modern designs and contains the best devices and display technologies among all the other participant pavilions, these features earned the Saudi pavilion numerous rewards. (Boris Micka Associates BMA, n.d.) Moreover, the Saudi Pavilion, second to none was the largest and most

expensive after the Chinese. The researcher believes that there were cultural codes in the Saudi Pavilion achieved through the innovative dimension based on the cultures of the two countries. This gave it a cultural value that began from its name, “Moon boat.” Saudi and Chinese staff who were in charge of this project presented a design philosophy that brought to mind the splendor of communication of the sea and land Silk Road between China and other countries, the most important among all was the Arabian Peninsula in which Saudi Arabia is the largest part. The exterior design of the pavilion is boat-like, hinting of the sea Silk Road which has been used by the Arabian and Chinese boats for thousands of years. The Saudi pavilion is the only one that has a unique religious feature in its direction to Mecca. It refers to the significance of Mecca for all Muslims around the globe. The land silk road was represented by the spiral road inside the pavilion which starts from its bottom to the top, replicating the journey from the land of China, with its water and gardens to the land of the Arabian Peninsula with its villages which have oases, palms, tents, and moonlight. This great contrast is united by a deep-rooted history that tells various cultural stories which link the two countries. This historical value for the silk road, which was derived from the Chinese and Arabian cultures and represented in the design of the Saudi Pavilion, was a great success, the evidence of which was the fact that the visitors willingly waited for six hours to enjoy it. Exactly three years after the 2010 Expo, the Chinese president Xi Jinping announced the most important national Chinese project, the revival of the Silk Road as an economic and cultural project under the title of One Belt, One Road (OBOR). This has undoubtedly become a successful project in every criterion. Like the Silk Road inspired “Moon Boat,” this project unites cultures, establishes friendship ties, and achieves prosperous economic exchanges for all the countries traveling along the Silk Road. (EXPO 2010 SHANGHAI, 2017) (CHINA Private Travel, n.d.) (Arch Daily, n.d.) (Designboom, n.d.) The benefit we can get from this example is that culture is an infinite source of wisdom, which can be represented in a countless number of inventions, innovations, and design. This philosophical dimension reminds us of the saying by Wangari Maathai,⁴⁰ “Culture is coded wisdom” (AZ Quotes, n.d.)

⁴⁰ A Kenyan environmentalist, political activist and writer (1940-2011)

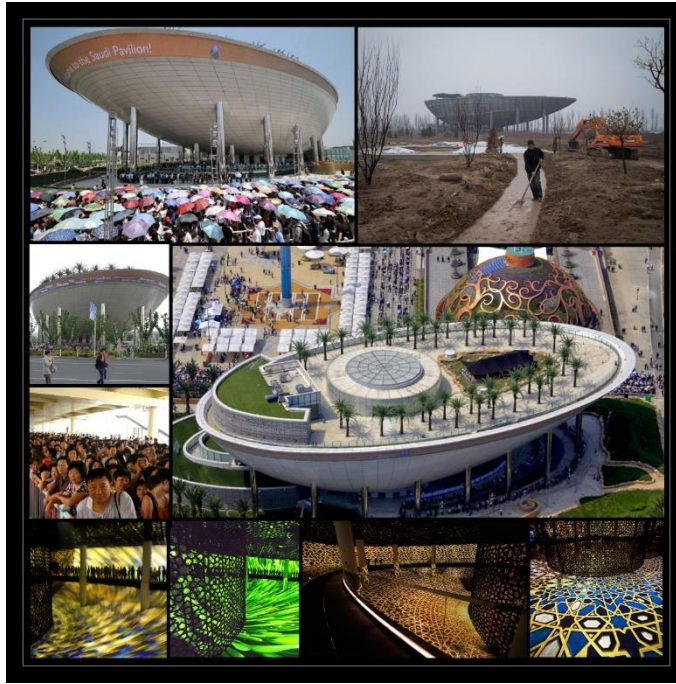


Photo 1, Saudi Pavilion, Expo 2010. An architectural concept represents a historical idea of silk road by connects China (ground level) with the Arabian Peninsula, Saudi Arabia today (roof level) through the multimedia projection on the world's biggest screen surface at that time (silk road). Source: Google images.

1.7.2. Culture enhances architecture (Spain Pavilion Expo 2010)

The Spain Pavilion 2010 Expo is a unique architecture concept that deals with culture by design through two aspects: a philosophical aspect interacting with finding defiant ideas compatible with the atmosphere through developing the heritage data of handicrafts that can be integrated with the modern architecture design. The second aspect is reviving the culture of wickerwork craft⁴¹; a heritage practiced in different styles by all nations and peoples; therefore, it can be developed and used among the defiant ideas and new building technologies. The most beautiful thing achieved by this philosophy is the ability of the designer Benedetta Tagliabue ⁴² to revive and operate the heritage in unconventional ways to be among the building technologies of the 21st century. That helps in raising the intellectual awareness of the designers and opens economic channels through supporting the Chinese craftsmen in this project – and thereby increasing the production of wickerwork.

Additionally, the craftsmen participated as basic manpower in building of the pavilion. The architect says “Basketry techniques, handicrafts with natural fibers, are a global tradition shared by cultures of all ages. Even though they vary from region to region, they occur in similar ways East and West. In this

⁴¹ material or products consisting of plaited or woven twigs or osiers; articles made of wicker (dictionary.com)

⁴² An Italian Architect 1963~ lives and works in Barcelona.

sense, the material choice for the pavilion attempted to bridge a gap between two cultures, the Spanish (visiting) and the Chinese (the host).” (MIRALLES TAGLIABUE EMBT, n.d.) With this project, the architect has set new economic and architectural foundations that can be a starting point for innovative and environmentally friendly designs. This brings to mind the words said by Philip Johnson⁴³, “The future of architecture is culture” (AZ Quotes, n.d.)



Photo 2, Spain Pavilion, Expo 2010 is a unique architecture concept that deals with culture by design through developing the heritage data of handicrafts which can be integrated with the modern architecture design. The second aspect is reviving the culture of wickerwork craft

1.7.3. Culture spreads religion (Saudi Mobile Mosque)

“The Mobile Mosque “ (Abdullah Sa'ad2016 ◌) is a Saudi innovation that helps Muslim congregations to perform the congregational prayers at their times, even when they are away from mosques. This invention is a mobile vehicle designed to serve as a fixed mosque. It has a high part, which serves as a symbolic minaret, it carries the loudspeakers and lights, a place for praying carpets enough for hundreds of people, mobile water taps for ablution before the prayer, toilets for men and women, a water tank and an electricity generator. Unfortunately, this project did not get the necessary support from the Saudi government; it is still dependent on the donations of some religious organizations in the Saudi cities. Similar to the innovative style of the mobile

⁴³ An American Architect (1906-2005)

mosque, a Saudi person invented the prayer carpets that are kept in a box. This box is bought as an ongoing charity and placed in the daily crowded places such as markets, public buildings, public gardens... etc. the reason behind this invention was to offer a solution to the storage of the traditional prayer carpets in such places. The invention works manually or electronically; the user manually pulls the prayer carpet out of the box during prayer time and afterward puts it back manually or electronically. Another invention that attracts multitudes in Saudi Arabia and the Arabian Gulf Countries market is a machine used to wash the feet without raising them to the sink. Washing feet is necessary for the completion of a Muslim's ablution before prayer.



Photo 3, The Mobile Mosque. A Saudi innovation that helps Muslim congregations to perform the congregational prayers at their times, even when they are away from mosques.

This invention was highly beneficial to the old and sick people, who, because they battle in raising their feet to the sinks, normally have to resort to buying low water taps. One can say that there are multiple innovations based on the Islamic religion and the Saudi culture, as both religion and culture almost include all aspects of life in this region. These innovations stem from Saudi Arabia and the Arabian Gulf Countries as ideas carried by merchants to Japan, Taiwan, China, Korea, India, and Malaysia. to be produced as profitable goods without interest and to register them as innovations and inventions. The intellectual property of these products then belongs to manufacturing countries. One can say that the Islamic religion and the Arabian culture and heritage is a

“gold mine” of innovative thoughts that have yet to be exploited as innovations and designs. In order to exploit these treasures within any culture or heritage or even within a religion, we have to know that "Innovation is an ongoing process that you build into your culture" (AZ Quotes, n.d.) according to Tony Robbins⁴⁴.

1.7.4. Culture activates nature (Green-In-Hand Food Bank)

Green-In-Hand Foodbank is a Taiwanese company established in 2006 to encourage farmers to produce natural foods. The company's role was separately designing the packaging of each product, then marketing and selling them through the trademark “Respect Nature, Respect Growers” (HKDC Awards 2011, 2011) this project included rice, honey, and tea.



Photo 4, Green-In-Hand Foodbank, is a Taiwanese company established in 2006 to encourage farmers to produce natural foods. The company's role was separately designing the packaging of each product, then marketing and selling them through the trademark “Respect Nature, Respect Growers.”

This innovative method has encouraged Taiwanese people to revive the culture of agriculture. It has positive results regarding the handicrafts which were negatively affected by the migration to the commercial cities and the large modern urban communities. The company won the DFA Special Award for Culture 2011, HKDC, for two main reasons; innovative solutions based on the culture and heritage of Taiwan. The first reason is the philosophy of Return to down-to-earth rural values, expressing a strong cultured consumerist

⁴⁴ An American businessman, author and philanthropist (1906-present)

movement and respect for nature, and respect for the grower. (HKDC Awards 2011, 2011) The second is the use of low-cost local materials that are used in manufacturing the packaging and corporate identity, both made from local paper and cloth. The company's goal was not financial gain through selling the final product; its goal was the success of the production circle, starting from encouraging agriculture, following up with the farmers in their fields, and helping them in decision making from and in marketing the product. This project gives us a scientific idea that culture cannot be separated from its natural surroundings in cities or villages as Toby Hemenway⁴⁵ said, "A culture disconnected from wild nature becomes insane" (AZ Quotes, n.d.)

1.7.5. Culture generates aesthetics (Boat Bench)

If someone sees the "Boat Bench" by the designer, architect and artist Lv Yongzhong⁴⁶, he or she will feel that "your culture is your brand" (AZ Quotes, n.d.), a brief cultural concept by Tony Hsieh⁴⁷. You can feel it when your imagination sails between the majestic Chinese history and the current time of China, which sails to the future. Boat Bench is a philosophy combining two elements, wood as nostalgia about the beautiful past and metal as the strength of the present and the future. Although they are two different materials, Lv Yongzhong proved the ability of the nature loving Chinese mind to merge both elements to form an amazing aesthetic and functional integration. The modern Chinese revolution seems to be a step away from its cultural and civilizational heritage, but there remains proof that many gifted artists and designers established their inclination and orient themselves according to the knowledge inspired by the Chinese ancient wise men, by the values of innate beauty and by the Chinese handicrafts which are mentioned in the inherited books of Arabs and Muslims. As a designer, Lv Yongzhong succeeded in reflecting multiple works through BANMOO⁴⁸, which is like an innovation stemming from the Chinese culture. Among these works: The Seven String Qin table, the table is evolved from a specific type of table that is used for an ancient Chinese instrument called, Seven String Qin. The profile of the table is reminiscent of

⁴⁵ An American author and educator, written extensively on permaculture and ecological issues (1952-2016)

⁴⁶ A Chinese architect and artist (1968-present). Founder and Chief Designer of BANMOO.

⁴⁷ An American internet entrepreneur and venture capitalist (1973-present)

⁴⁸ A contemporary Chinese furniture and lifestyle brand.

the costume worn during the Han Dynasty. (BANMOO, n.d.) Among Lv Yongzhong's philosophy support of culture, one that comes to mind is, "Culture is blended into every stroke, every detail and every proportion" (BANMOO, n.d.) Culture creates and makes room for the role of innovation. He says, "Innovation should be the result instead of the purpose" (BANMOO, n.d.) He also says that sustainability comes from the core, not from the shape, "Discovering the essence instead of the form is the way to construct" (BANMOO, n.d.)



Photo 5, Boat Bench, is a philosophy combining two elements, wood as nostalgia about the beautiful past and metal as the strength of the present and the future. Although they are two different materials, Lv Yongzhong proved the ability of the nature loving Chinese mind to merge both elements to form an amazing aesthetic and functional integration.

1.7.6. Culture regenerates heritage (Shang Xia)

Lorraine Wild⁴⁹ says, "You have to be interested in culture to design for it" (AZ Quotes, n.d.) This is especially applicable to Jiang Qionger's⁵⁰ designs, which express the Chinese cultural heritage, whether it is men and women's fashion, furniture, home utensils and leather goods, which all carry her trademark, Shang Xia⁵¹. Her work reflects the modern vision, the open mind and the innovative spirit, which enables her to preserve the eastern and western traditions, equally respecting them to create new aesthetics and forge international friendships appropriate for China's position in the 21st century. An

⁴⁹ A Canadian graphic designer, published writer, art historian, and art instructor of design.

⁵⁰ A renowned Chinese designer and founder of 'shangxia'.

⁵¹ A brand of continuous flow of inherited Chinese culture throughout past, present and future.

example of her work is Qionger's Bridge and Dragon Cloud – Gilded Bamboo Woven Porcelain Teaware and ornaments created using the finest handcraft techniques. While the Dragon Cloud set represents over 1,000 hours of painstaking work by master artisans. The sets are expertly finished with hand-carved thin bamboo strips woven in the mesh. The bamboo fibers are less than half a millimeter in width and are gilded in five layers of 18k gold dust with minute accuracy, then tightly woven over white porcelain that has been fired at an extremely high temperature. (Jiang Qionger, n.d.)



Photo 6, Shang Xia's work reflects the modern vision, the open mind and the innovative spirit, which enables her to preserve the eastern and western traditions, equally respecting them to create new aesthetics and forge international friendships appropriate for China's position in the 21st century.

1.7.7. Culture emphasizes wealth

Chi Wing Lo is a highly skilled professional architectural designer, known for his meticulous work evident in his creative use of materials. One of his many skills includes combining architecture, interior design, art and furniture design. The works of Chi Wing Lo are said to carry real feelings in their design. They stem from the designer's knowledge of the culture and heritage which he deals with. For example, his furniture designs have meaning in the way they interact with past, present and future. "Simple and versatile, humble and full of ingenuity, ample and precious, always infused with a true sense of timelessness," when Chi Wing Lo established 1NESS Company, his goal was "to unite wisdom and sensibility of the past and present, creating objects that are lasting, simple and essential." In other words, "sharing people his work that

is inspired by unique materials and techniques that have been passed on to our generation." For Lo, the design enhances the value of daily life through the things we make with our hands and reflect our originality and identity. He says, "Designed to enhance the quality of daily life, these containers, vases, mirrors, trays, water mazes, among others, are precious and collectible, they encourage us to preserve and to appreciate that there is much sincerity derived from the work of our hands." He adds that some of these designs (objects) "evoke a sense of humility and calmness, and occupy a special place in the inner domain of our habitation, reconnecting us to the healthy essentiality of life and living." The philosophy thought and meticulousness of Lo's works confirms that "Culture is like wealth; it makes us more ourselves, it enables us to express ourselves" to quote Philip Hamerton⁵².

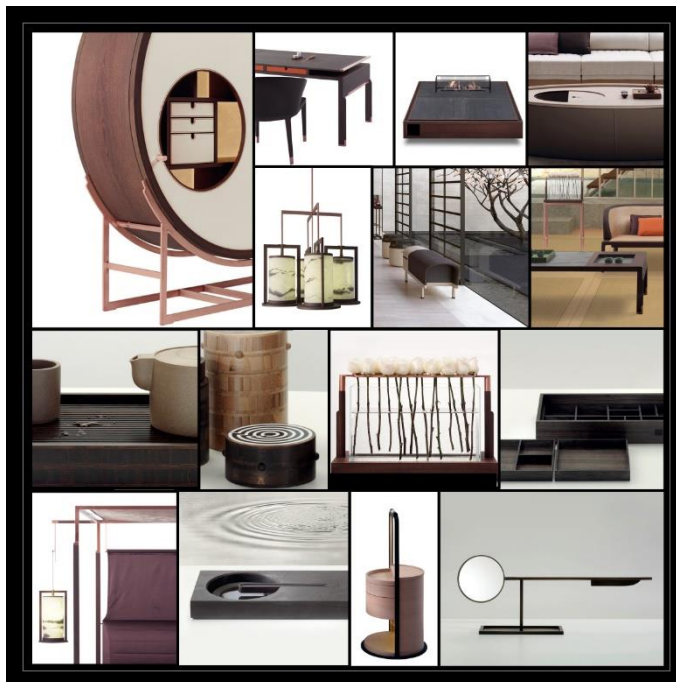


Photo 7, Chi Wing Lo established 1NESS Company; his goal was "to unite wisdom and sensibility of the past and present, creating objects that are lasting, simple and essential." In other words, "sharing his work that is inspired by unique materials and techniques that have been passed on to our generation."

1.7.8. Culture promotes systems

Kenji Ekuan⁵³ is an award winning and internationally acclaimed pioneer in the Japanese industrial design profession. All his works reflect moral and material values based on a philosophical depth for the daily needs of people as well as the beauty of the Japanese environment, culture, and heritage. Ekuan rose to

⁵² English artist, art critic and author (1834-1894)

⁵³ A Japanese industrial designer (1929-2015). Founder of GK design group.

fame in the 1950s when he established GK Industrial Design Associates in 1957. He designed many products like the famous “Soy Sauce Bottle” for Kikkoman Company in 1961, from 1955 he began with a series of Yamaha Motorcycles; as well as a series of trains, the most important being, The Shinkansen Bullet Train in 1997.

His innovative and design philosophy included products in all fields like Mobility, Environment, Communication, Technology and more. GK is still working in many fields of design on a global level under the title of GK Design Group. Despite Ekuan’s death in 2015, this group is considered a valuable tower in the field of design and innovation.

Ekuan won the Design for Asia “DFA Lifetime Achievement Award” as a Pioneering Humanist Design Master. The agenda of the HKDC Awards 2011 explained that “Ekuan plays a key role in bringing together designers, business and leading organizations Ekuan’s eloquent, ideological writing on the meaning of the design of objects in everyday life and the interpretation of design activities in relation to Japanese Cultural life... Ekuan , metaphorically explains the lunchbox 's much deeper interpretation that unravels Japanese Culture, its spirit , form aesthetics and the ideal that many can be reduced to one“ (DFA Awards, n.d.).



Photo 8, Kenji Ekuan, is an award winning and internationally acclaimed pioneer in the Japanese industrial design profession. All his works reflect moral and material values based on a philosophical depth for the daily needs of people as well as the beauty of the Japanese environment, culture, and heritage.

Most of Ekuan's works stem from his knowledge of Japanese culture and heritage. It is embodied in his book "The Aesthetics of the Japanese Lunchbox 1980". He set ten axioms, which consist of the Beauty of Form. They are, Functional Multiplicity, Equipment Exciting Creativity, Prototype, Unification in Diversity, All-Inclusive Enhancement, Profusion of Enjoyment, Ultimate Adaptability, Waste Avoiding, Culture, and Generosity. (Ekuan, 2000)

Ekuan also guides future generations in the field of design and innovations to the democratization of design and humanizing machine, which need to focus on people's future lifestyles, but within nature's constraints and aesthetics, based on this thought, Ekuan gave five pieces of advice for the future generations of designers: To know our daily life, To be good at observation, To be resource-saving, To be space-saving, To have a product with a certain relevance to its surroundings." (Hong Kong Design Center, 2011)

Ekuan's a great example of the use of culture not as a form and material but far behind that is use of his Japanese culture in its moral depth as a system of operations that has to achieve outputs based on the core and shape, the quality and beauty. Here comes the perspicacity and the success of Terence McKenna⁵⁴, when he said, "Culture is your operating system" (AZ QUotes, n.d.)

1.7.9. Culture abstracts art (Plensa's Sculpture)

Jaume Plensa, born in Barcelona in 1955, is a famous international sculptor. His inspirations came from the culture, daily life, and the outputs of architecture. All of his sculptures are from various materials such as iron, wood, glass, marbles and stone. He also depends on the light as a basic component in his works. Some of his famous works are: CROWN FOUNTAIN at Millennium Park (Chicago, USA), DREAM a large scale sculpture (Liverpool, U.K.), ROOTS (Tokyo, Japan), WONDERLAND (Alberta, Canada) and OGIJIMA'S SOUL (Kagawa Prefecture, Japan). OGIJIMA'S SOUL Project is a center where the people welcome visitors and guests. It has a roof that is like a cloud that the sunlight comes through and reflects the shadows on the ground and in the dark

⁵⁴ An American ethno botanist, mystic, psychonaut, lecturer, author (1946-2000)

night sky, it creates a romantic, cultural and unprecedented scene. This roof is also an artistic design containing random letters and the alphabets of multiple languages, such as Japanese, Arabic, Hebrew, Latin, Chinese, Greek, Russian and Indian. The aim is to represent the different cultures that our world is comprised of.



Photo 9, Jaume Plensa, is a famous international sculptor. His inspirations came from the culture, daily life, and from the outputs of architecture. All of his sculptures are from various materials such as iron, wood, glass, marbles, and stone.

The designer's use of the alphabets in most of his works is: first, they symbolize a joint culture which unites all the various cultures on earth. Second, an inspiration and lasting cultural values regardless of the changes or developments that happened throughout the centuries. Third, they are poetic components linking this place with its surrounding. A person can feel the surroundings through the design by merely looking at it. By looking at the Japanese project, we find the design of the poetic cloud consisting of the alphabets, as a poem that links the beauty of the sea and the beauty of the earth and what they include of Allah's infinite creativity. That makes us always grateful to our culture and heritage, so we stimulate our minds to use them to produce new things. In this context, the designer Jaume reminds us of the artist Robert Longo⁵⁵ when he said, "The artist has to be a guardian of the culture" (AZ Quotes, n.d.)

⁵⁵ an American painter and sculptor (1953-present)

1.7.10. Culture supplements other cultures (Martial Arts)

Bruce Lee was born and raised in Hong Kong, he then relocated to the United States of America to study philosophy, where he opened a school for martial arts where he trained and practiced. It is through this practice and renewal of this ancient Chinese art that he gained international fame through the numerous action Hollywood films he starred in. To master this art, he had to draw wisdom from the Chinese culture, specifically from philosophical sayings such as, "Be Water My Friend" by Lao Tze. Having learned Kung Fu from his coach Ip Man and the art of adventure, excitement and enthusiasm from American film celebrities, Elaine Ann⁵⁶ said, "Bruce is the ultimate example of what people in Hong Kong should become for he mastered BOTH Eastern and Western cultures, integrating the best of both worlds in fighting styles and inventing his own." Ann concluded that the community of innovation and Entrepreneurship should get the advantages from Bruce Lee's successful mastery of two cultures: first, understanding other cultures and benefiting from them through operationalizing the data of the mother culture and creatively fusing it with other cultures that the person has lived or is interested in. She said, "It will not be enough to be copycats of the West... Bruce Lee reinvented traditional Chinese martial arts and internationally exported Chinese "soft power" through his movies, thus internationally changing the face of Chinese men as 'Sick Man of East Asia'...therefore think about what is uniquely Chinese and innovatively solve local problems? Start your ideas from home." Second, Bruce Lee knew the strong points he inherited from his culture; therefore, he did not need to imitate the "western hero." Rather, he exploited his culture and cleverly used it to create an eastern hero at a time when it was difficult to change a western hero's dominant culture; this is how he changed the face of the international cinema. Additionally, Bruce Lee became an appealing figure to the youth, not only through his creative and innovative abilities, but also because of the strong cultural points he embodied, such as moral values, philosophical wisdom, and heroic actions. The fact that his name and legacy continue to live on to this day is proof that he successfully exported Chinese culture, specifically martial arts. Ann said, "In fact, Bruce's philosophy is to have no fighting style but to use what

⁵⁶ A strategic innovation consultant, founder of Kaizor innovation.

is the most suitable and strategically advantageous to you... Being a Panda (China), you can't fly like an Eagle (U.S)" Third, Bruce Lee has benefited from the Chinese culture and its ancient heritage in fighting and self-defense. That was not enough as he wanted to prove that this culture is strong and is based on solid foundations and that it can be of equal benefit to non-Chinese people. Therefore, he developed that culture to reach an international standard and to reflect the true strength of the Chinese man, as one who can compete and overcome challenges using his abilities and not by using fictitious fantasy technique. (Ann, 24)



Photo 10, Elaine Ann said, Bruce Lee developed culture to reach an international standard, and to reflect the true strength of the Chinese man, as one who can compete and overcome challenges using his abilities and not by using fictitious fantasy technique.

Through developing his own Chinese culture “the eastern” and mastering the American culture “the western,” which he loved and lived in, Bruce invented a new self-defense art called JeetKune Do. According to Ann, he would not have been able to accomplish that without "mastering the Chinese classics (martial art) and Western fighting styles." This model of innovation, which is based on culture, does not depend on the place or the time of globalization, nor does it depend on knowledge and the various channels of communication. It depends on generating opportunities through the interaction and integration of cultures. Today we find another Chinese art sweeping the world, not for self-defense but rather to protect and maintain health and fitness; it is called Tai Chi, which is the training of certain body movements and the improvement of the mind's

concentration, which leads to relaxation and optimism. In the end, I am full of praise for Elaine Ann as she is among the few designers and innovators who dealt with the topic of culture and heritage with this actual and practical philosophy as if she wanted to tell the younger generation, young designers and innovators that culture can be interactive, not only in its motherland but also in other countries. Here we remember the saying of Italian director Bernardo Bertolucci⁵⁷, "I don't think you can in any way export culture with guns or tanks" (AZ quotes, n.d.)

1.8. Culture Perception Criteria (CPC)

Culture-Based Innovation needs thinking outside the box to understand the interactive meaning of culture issues through the four sources we reviewed. Positive progress in this field can only be achieved through the power of noticing the complex things around us. However, we need to analyze these complexities to investigate the relationship between culture and business, culture and design, and the interactive nature of culture with the various aspects of people's daily lives. This collected information must be treated in a way that makes it creative enough to accommodate more sophisticated knowledge. After that, we need to synthesize this creative knowledge according to the requirements, as some of them have been seen through the analyses of the twelve projects. We can say that in this section, the level of knowledge about Culture-Based Innovation is about the first level of knowledge, according to Ibn Khaldun's classification, which will be discussed later. This level is man's intellectual "the understanding of the things that exist in the outside world in natural or arbitrary order, so that he or she may try to arrange them with the help of his or her power. This thinking mostly consists of perceptions (tasawwur). It is the discerning intellect with the help of which man obtains the things that are useful for him or her and his or her livelihood and repels the things that are harmful to him or her."

Based on the above, we have suggested the Culture Perception Criteria (CPC). It is a model that makes us continuously notice culture and heritage through observation and exploration, not only for data collection. Figure 1.6 shows the Culture Perception Criteria (CPC)

⁵⁷ An Italian director and screenwriter (1940-present)

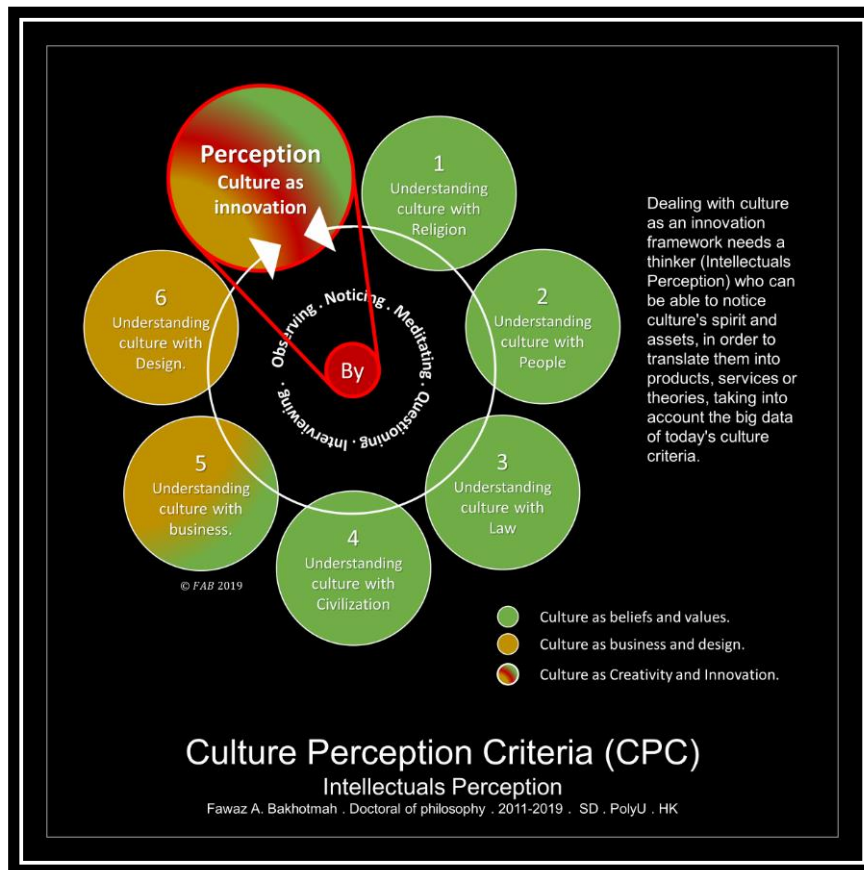


Figure 1.6 Culture Perception Criteria (CPC) Dealing with culture as an innovation framework needs a thinker (Intellectuals Perception) who can be able to notice culture's spirit and assets, in order to translate them into products, services or theories, taking into account the big data of today's culture criteria. concept: Fawaz A. Bakhotmah..

Chapter Two

Study Argument

- 2.1. Study Arguments
- 2.2. Study Questions
- 2.3. Study Goals
- 2.4. Study Objectives
- 2.5. Study Significance
- 2.6. Approaches to Study
- 2.7. Study Plan
- 2.8. Study Contribution
- 2.9. Study Limitation

2.1. Study Arguments

There are four important national issues for Saudi Arabia's future development and competitiveness at the local, regional and global levels. The researcher reached these issues through several means, the most important of which are: The Saudi society's debate over its developmental, economic and social issues on the social networks, the critical writings and opinions of some specialized Saudi scholars, access to books and researches related to Saudi development. The researcher believes that the four issues he has reached are crucial developmental issues that could hinder Saudi Arabia's competitiveness in the future and drop to low figures in international assessment indexes if not taken seriously by political, economic and social decision-makers with an open mind that considers the opinions of others. The four issues are:

2.1.1. Vulnerability of production diversity

Weak experience that takes the interaction of the system of development work from institutions, systems and strategies towards creating a diversified production based on multiple outcomes of creativity, innovation and design.

2.1.2. Vulnerability of knowledge economy

The slow scientific and practical approach towards activating the strategy of the society and knowledge economy, which was officially adopted in 2005 for the development of human resources and the economy through thinking creatively and working to innovate and invest in them.

2.1.3. Vulnerability of creativity, innovation and design

Limited practical benefit of the activation of the capabilities of creative, innovative and talented individuals, with a significant imbalance in activating the role of designers on the one hand, and the availability of specializations of design, despite the importance of development and economy on the other.

2.1.4. Vulnerability of culture as an added value

Unclear situation of culture and heritage! In other words, is the interest in culture and heritage in the Kingdom of Saudi Arabia within the "Saudi cultural leap" for the purpose of preserving and showing casing them in festivals and initiatives with limited traditional social and economic benefits? Or is interest in culture and heritage to build a "Saudi civilizational model" that aspires to

competitiveness and to benefit from the talents of the nation and the potentials of the era, with creativity, innovation and design?

In an effort to ensure that these issues do not have personal conclusions and opinions, shrouding them in the circle of doubt and disbelief, the researcher investigated them by analyzing the content of nine development plans. He began from the first development plan (1970-1974) until the end of the Ninth Development Plan (2010-2014), in addition to reading some strategies and the 2030 vision of Saudi Arabia and its 2020 transformation program in order to identify the reality of the four cases. During his exploratory and analytical reading of the following development plans, the researcher took into consideration:

Development plans do not provide definitive evidence of what the state is doing or what it will do. However, there are policies and development goals that must be formulated within these plans. They are often affected by three things: (1) Showing the economic system with a positive perception besides making the negatives within the framework of assurances, (2) Showing the political and economic environment as factors that stimulate the mobilization of resources as far as possible from the inside or outside, (3) Reducing the importance of direct or indirect political influence on developmental trends in general or market transactions in particular. Thus, we can say that the development plans are a strategic means of communication between state institutions on the one hand and, on the other hand to give a variety of messages of continuous optimism in the development of strategic solutions, and implementation of development projects, and provide economic assurances. Therefore, plans should not be taken as conclusions, but must be seen through the achievements in reality and the results of scientific research.
(Hvidt, 2013, p. 17)

Therefore, the researcher has developed four research questions, which will be reviewed in the following topic.

2.2. Study Questions

Due to additional information regarding the study arguments of the four vulnerabilities, the researcher has developed four research questions:

2.2.1. First question

Is the vulnerability of product diversity due to the lack of prioritization between the expenditure on projects (realm of things) or the generating of ideas (the realm of ideas) or attracting competencies (the realm of persons)?

2.2.2. Second question

If Saudi competencies (realm of persons) are the ones who will steer the country's next development, and they are fully aware of the importance of creativity, innovation, and design as a requirement for knowledge economy; the question then is what should the priorities be in finding solutions for existing issues (realm of things)? Or to activate the creativity, innovation, and design (realm of ideas)?

2.2.3. Third question

Assuming that the priority of future development will be given by creativity, innovation and design (the realm of ideas), how should the Saudi development model "Saudi cultural model" be based on the ingredients of creativity, innovation, and design, not only on oil revenues or transformational industries?

2.2.4. Fourth question

Is the culture and heritage of Saudi Arabia (the culture and heritage of the Arabian Peninsula) an inspiring, powerful, effective and rich culture capable of taking the lead in promoting Saudi development towards a new era of progress and prosperity based on knowledge and talent, innovation and design, production and industrialization?

2.3. Study Goals

Accordingly, this thesis has the following goals:

2.3.1. First goal

To transform the current interest of Saudi Arabia in culture and heritage, from tourism programs, national festivals and traditional activities, to knowledge

creation, innovative power and productive capacity capable of building a clear path of economic diversification.

2.3.2. Second goal

To activate the foundations of culture from religion, history, civilization, art, science and architecture to be a sustainable knowledge input that results in innovative and creative outputs that take into consideration the requirements of the times and the glory, authenticity and identity of the Arabian Peninsula.

2.3.3. Third goal

To know that creativity, innovation and design are shaped in the realm of things. They are implemented in the realm of people, and the realm of ideas works to develop, improve and sustain them. Therefore, the concepts and priorities of each culture must be defined around these three worlds based on political, economic, scientific and social conditions.

2.3.4. Fourth goal

To prove that culture as a methodology of innovation and design cannot be limited to definitions of narrow intellectual visions or specific scientific or social disciplines. But the power of culture can be sought as a methodology of innovation through the knowledge of its elements, its approaches, its specialties, and its historical association with the past, the present and the future.

2.4. Study Objectives

We have already mentioned that this thesis discusses the importance of supporting innovation for development in Saudi Arabia through its culture and heritage, derived from the values of the Islamic religion and the achievements of its ancient Arab civilization. This approach can be scientifically termed culture-based innovation. The researcher adopted this term as it is the result of a scientific initiative that is consistent with the researcher's goals towards the importance of culture and heritage in development, as explained earlier. This initiative has not done so in theory and practice. The scientific-based model of the culture-based innovation model⁵⁸- defined in Part One - is limited in scope. It does not exceed some of the projects carried out by some members of the initiative. The reason for

⁵⁸ Read more about the concept of “culture-based innovation model” in chapter one.

the non-proliferation of this initiative may be the lack of scientific dissemination or because of the lack of scientific research and practical applications based on it. The researcher sought to deepen and specialize in this scientific orientation for three objectives:

2.4.1. First objective

The roots that belong to the subject of the era of the golden age of Islamic civilization⁵⁹, where the mark (Ibn Khaldun), the spiritual father of sociology and human architecture 1377 m, support that there is a direct relationship between culture and both knowledge and construction and the state's interest in the industry of building its civilizational model. Ibn Khaldun proves his experience and realism that the circulation of culture among people and their positive growth among them becomes (ṣanā'i '60) material and intangible. Culture in the concept of (Ibn Khaldun) does not adhere to the Western concept of culture, but is an integrated way of life.

2.4.2. Second objective

Most of the discussions on the topics of culture and its theses are theoretical approaches and very few of them, and almost none (according to the researcher's knowledge) are practical, methodological or developmental approaches, as is the case with Ibn-Khaldun⁶¹ and Malik Bin -Nabi⁶²) and Paul Schafer⁶³.

2.4.3. Third objective

From the eighties of the last century, seeds of interest in culture and heritage were planted with great care by Saudi Arabia's late King Abdullah Bin Abdul Aziz⁶⁴ when he was crown prince under the guidance of the National Festival

⁵⁹ The Islamic Golden Age is the era in the history of Islam, traditionally dated from the 8th century to the 14th century, during which much of the historically Islamic world was ruled by various caliphates, and science, economic development and cultural works flourished. (Wikimedia, n.d.)

⁶⁰ Crafts, Professions, Jobs...

⁶¹ See chapter four, Ibn-Khaldun (1332-1406) "Culture without Called It Culture"

⁶² See chapter four, Malik Bin-Nabi (1905-1973) "Culture of three realms"

⁶³ See chapter four, Paul Schafer (1937-) "From Economy age to Cultural age"

⁶⁴ Abdullah bin Abdulaziz Al Saud was King of Saudi Arabia and Custodian of the Two Holy Mosques from 2005 to his death in 2015. (Wikimedia, n.d.)

for Heritage and Culture⁶⁵ held annually for two weeks under the direct supervision of the Ministry of the National Guard. Today there is an intensive activity of culture and heritage in Saudi Arabia and billions of expenditures under the names of several festivals, occasions, celebrations, and tourism programs. An example is the Souk Okaz⁶⁶ that is a cultural heritage project with a total area of 10 million square meters with a total investment of more than 2 billion US dollars. The city of Okaz is expected to attract more than 2 million tourists a year, with an economic impact on GDP of US \$ 2.5 billion and provide more than 12,000 new jobs when the project is completed. (Sooq Okaz, n.d.)

Nevertheless, the Arabic word (AL-THAQAFAT) is the closest Western translation of the word (CULTURE). However, the researcher, sought to benefit from the knowledge attached to both terms in Arabic and English. Therefore, in this study will use the term (AL-THAQAFAT) as:

A truth that promotes the use of religious, mental, social, political, economic, etc. knowledge, to create productive models that considering, the achievements of the past, the requirements of the present and the scenarios of future. These models help creators, innovators and designers, to generate products, services or theories that provide quality development. Moreover, (AL-THAQAFAT) must raise heritage not only to maintain or revive, but also to analysis and then synthesis new aspirations. It is important to clarify some of the basic facts of Arab culture in general and particularly Islamic culture; these facts may not exist in other cultures:

- Reflecting on the Quran is one of the most important sources of cultural awareness, which is reflected in the perception of life,
- Biography of the prophets, the culture of learning the thought, behavior and goals of exemplary human beings in addition to their sacrifices,
- Worship of God, one of its objectives is that it is a culture that expands the breadth of science and work, and narrowed the science of the lack of work,
- No separation between religion and life, between heritage and progress, between legitimacy and science... All these and other models of cultural excellence,

⁶⁵ See chapter eight, the National Festival for Heritage and Culture.

⁶⁶ Souk Okaz is a souq, or open-air market, near Ta'if, in Saudi Arabia. It was the largest and best known souq in pre-Islamic times. Today it is a popular tourist destination. (Wikimedia, n.d.)

- Understanding the reality by thinking, analysis, devising, imagining, contemplating, extrapolation, reasoning, and criticism does not conflict with the realization of reality in religion, a philosophical culture created by Ibn Rushd⁶⁷,
- Islam insists on creating a development industry, and keeping away from imitations. However, Imam Ibn Al-Jawzi⁶⁸ stated something like that: The imitation is not confident in what he imitated in it, and in the imitation invalidated the benefit of creativity. Creativity is a path of meditation and thinking; ugly to those who gave a candle to light it but then walk with it In the darkness of imitation. Motivation to learn from the cradle to the grave, and faith in destiny and providence... It is a deep culture linking the realm of things to the hereafter,
- Motivation to learn from the cradle to the grave, and faith in destiny and providence... It is a deep culture linking the realm of things to the hereafter,
- Mastering all sciences, arts and crafts that do not counteract religion, values and customs, a culture that preserves the five essentials of Islam; religion, soul, mind, honor and money.

2.5. Study Significance

The importance of this, is presented in this thesis as: 1) harnessing culture and heritage in the formulation of a practical model that interacts with the four issues of study and promotes the development of Saudi Arabia's productivity. 2) Use the cultural and heritage resources and competencies available as input in the formulation of the practical model; 3) Make innovation, design and talent as the operational fuel of the practical model by adjusting its inputs and continuously developing its outputs.

In other words, this thesis attempts to activate some of the development plans in Saudi Arabia regarding culture and heritage, but with a different intellectual and productive approach, this will be explained in the subject of the study design. In order to learn what is stated in the plans, it is only here that two important items are highlighted in response to the Sixth and Eighth Development Plans. The Sixth

⁶⁷ Ibn Rushd (1126 –1198), was a Muslim Andalusí philosopher and judge who wrote about many subjects, including philosophy, theology, medicine, astronomy, physics, Islamic jurisprudence and law, and linguistics. His philosophical works include numerous commentaries on Aristotle, for which he was known in the West as The Commentator.

⁶⁸ Imam Ibn al-Jawzī (1116-1201), was an Arab Muslim jurisconsult, preacher, orator, historian, judge, hagiographer, and philologist who played an instrumental role in propagating the Hanbali school of Sunni jurisprudence in his native Baghdad during the twelfth century.

Development Plan (1995-1999) referred to two important strategic objectives for the vision of culture in Saudi Arabia:

2.5.1. First significant

The culture of Saudi Arabia is an integral part of the Islamic civilization, religion and ethics, such as what is an integral part of Arab civilization, language, history and heritage. On this basis, the culture of the Saudi must always remain by virtue of history and the depth of heritage.

2.5.2. Second significant

As the world turns day by day into a small village, through communication and communication technology, and the unprecedented flow of information. Communication with all foreign cultures is essential; it is important to invest in the strengthening and supporting of our culture and continue rationalizing this openness. Therefore, the plan considers that it has become a requirement for the concept of culture to go beyond the traditional concept, which gives the impression that it is a privilege for the elite, specifically writers and artists, which causes the culture of isolation from the rest of society. Culture is also a literary and artistic level, with adults being a creative necessity. Therefore, the culture must be commensurate with the level of material achievements of development and be a container for the consolidation of the efforts of all public and private institutions that have to do with culture, thus achieving the culture of efficiency and the advancement of its data.

The Eighth Development Plan (2005-2009) referred to what we might call a plan of action or a road map to activate the culture in the Kingdom of Saudi Arabia: In order for culture to play its positive role with the challenges of globalization, it is necessary to strengthen its capacity by providing its infrastructure in the field of information and communication technology, and to encourage the support of cultural products with a quality that is locally and internationally competitive. The plan also includes the development of cultural exchanges between the private sector, intellectuals and creators, a feat that will be achieved through encouraging and developing cultural exchanges with foreign communities through various means, such as joint cultural seminars and cultural conventions, and based on this, the plan has developed future proposals, including: A national plan of culture-defining its components

according to needs and aspirations, drawing on the experiences of the developed countries that have completed major cultural projects, as well as a plan to take care of the use of the Arabic language and disseminate it in the means of communication through the Internet, including the development and invention of new software that attracts the interest of Internet users.

All the above has been considered in this thesis. For example, the thesis on literature has relied on two of the most important Arab Islamic references to culture and civilization and this reinforces the first objective mentioned above in the Sixth Development Plan how it interacted with the cultures of others and specifically China through its development experience based on innovation and culture. By analyzing three case studies, this enhances the second objective. In order for the development plan to be activated by making culture and heritage an effective supporter of development, the National Festival for Heritage and Culture was selected to be the focus of the applied study of the practical cultural model that we referred to at the beginning of this topic.

2.6. Approach to Study

In order to be confident that innovation based on culture will be one of the positive factors in Saudi's development towards economic diversity, promoting the economy and society of knowledge and spreading the culture of creativity, innovation and design, this thesis will present two inspiring experiences proving that the cultures of peoples, their human potential and available material resources were considered as factors of progress and mechanisms of success. Since they were exploited by creative thought and creative behavior in generating a system of things that corresponded to the needs of the times, while simultaneously carrying the true significance of culture and its importance to peoples and societies.

2.6.1. First approach

The first experience that inspired the researcher is the factors of the success of the development of modern China ⁶⁹, summarized by the ruling party conferences held every five years. The researcher's attention was drawn to two

⁶⁹ Clarification, highlighting the Chinese development concept doesn't mean that the researcher agree with all China's thought of politics, economic, social, etc. However, the researcher is respecting the creative thought that suits the thesis topic, regardless of any other circumstances.

important development axes: first being innovation and the second being culture as a pillar of "China's modern civilization model." This model has made the most significant leap in a modern state. China in its cultural model did not deal with innovation as a methodology of production and industry only, but treated it as a mechanism of development, change and continuous quality that covered all areas of daily life. It has not only dealt with its culture as a lengthy history or a Chinese identity but has made it one of the most important tools of China's political and economic development. In the next few lines, we will provide clarity on the achievements of these two experiences based on what was issued by the ruling party during their eighteenth and nineteenth conferences, respectively.

The Eighteenth Conference of China's ruling party points out that there are two strategies that cannot be abandoned under any circumstances: (1) an innovation-based development strategy; and (2) a strategy for the cultural sector to become the pillar of the Chinese economy. The first strategy is to create a Chinese model that makes innovation a sustainable process in theories, institutions, science and technology, culture and other fields. The model also promotes financial innovations, original innovation, and integrated innovation, as well as knowledge-based innovations, understanding of global advances in science and technology, as well as innovations based on international cooperation and open economy, while striving to build a system for innovation in philosophy and social sciences. Regarding the second strategy, is the trend towards the establishment of more local cultural work and making greater progress in the export of Chinese culture abroad and that the cultural sector should be the pillar of the Chinese economy by making it important for the entire Chinese nation through encouraging the free flow of cultural inspiration from all sources. China is also developing systems to benefit and promote traditional culture, including expanding and standardizing the use of the Chinese language, promoting the development and prosperity of cultural activities of ethnic minorities, and also guiding, teaching and serving people to express themselves in the context of Chinese culture.

The Nineteenth conference of the Party stressed that five years after the 18th Conference, there is proof that the strategy of innovation-based development

is a highly successful one, which has accomplished many achievements towards making China an innovative country.

Through devoting great energy to implementing the innovation- development strategy, we have seen much accomplished towards making China a country of innovators, with major advances made in science and technology, including the successful launch of Tiangong-2 space lab, the commissioning of the deep-sea manned submersible Jiaolong and of the five-hundred-meter aperture spherical telescope (FAST) Tianyan, the launch of the dark matter probe satellite Wukong and the quantum science satellite Mozi, and the test flight of the airliner C919.

China's interest in innovation has led the world in trade, foreign investment and foreign exchange reserves. On the other hand, the party's congress stressed that its soft power and international influence increased because of its growing interest in its culture and heritage.

Culture is a country and nation's soul. Our country will thrive only if our culture thrives, and our nation will be strong only if our culture is strong. Without full confidence in our culture, without a rich and prosperous culture, the Chinese nation will not be able to rejuvenate itself. We will draw on China's fine traditional culture, keep it alive and develop its vision, concepts, values, and moral norms, and do so in a way that responds to the call of our era. With this we will see that Chinese culture maintains its appeal and evolves with the times.

The Party also pointed out that the importance of Chinese culture in development has made them seek to promote cultural exchange between countries and peoples, while conveying China's development-based experience of innovation and soft power of Chinese culture. The most important of which is the revival of ancient Chinese culture and ancient heritage, The new One Belt One Road Initiative (OBOR) builds on a new platform for international

cooperation to create new engines for joint development across land and at sea, as well as to collaborate in building capacity for innovation in infrastructure, business transactions, financial policies, and societies.

2.6.2. Second approach

The second experience was inspired by economists Justin Yifu Lin⁷⁰ and Célestin Monga⁷¹ in their book *Beating the Odds: Jump-Starting Developing Countries*, where they explained that:

"One of the most powerful ideas in economics is that no matter how bad a situation a country is in at any time, it always has a comparative advantage in some sectors or industries. It is therefore critical for policymakers in developing countries to start their transformation strategies by making the most of the existing economic conditions—instead of desperately trying to replicate and mimic the economic and financial institutions of high-income economies, even when they are not yet needed and cannot be sustained at low levels of development" [11, p. 316]

This creative thought and aspiration towards improving the economies of poor and developing countries on the one hand and the strengthening of the economies of other countries on the other are bold thoughts. They are an island transformation of the post-World War II economic thought based on the developmental thinking strategies of developed Western countries to serve as a model for developing and poor countries. Most of the previous strategies did not fully understand the importance of religions, cultures, competencies, potentials and comparative advantages of developing and poor countries, many of which failed to achieve their desired objectives. Based on the experience of the authors in the world of economics in the academic and vocational fields and their proximity to the strategies of the global economy, the positive economic

⁷⁰ A Chinese professor and economist. Chief Economist and Senior Vice President of the World Bank from 2008 to 2012. Director, Center for New Structural Economics. Dean, Institute of South-South Cooperation and Development. Honorary Dean, National School of Development Peking University.

⁷¹ A Chinese professor and economist. Chief Economist and Senior Vice President of the World Bank from 2008 to 2012. Director, Center for New Structural Economics. Dean, Institute of South-South Cooperation and

development of developing and poor countries must be part of a process of structural change that takes into account the capabilities and poverty through three basic pillars:

The first is to give the utmost importance to the discovery of what is fundamental and what is relatively proximate in the economic development of each developing or poor country, individually through their capabilities and potentials and advantages. The second: Give importance to how to change in proportion to their development approach. The third: The aim of upgrading the economy of poor and developing countries is not to be similar or competitive to developed countries, but to be optimistic that it has the capabilities and possibilities and features to activate investment and development.

These pillars help to design and implement more realistic strategies, with a significant difference in infrastructure and physical and human capital. It also strengthens the focus on the development of competitive industries and the establishment of clusters and industrial complexes and services that are consistent with the relative capabilities and advantages of developing and poor countries. The three pillars are given by cooperation between countries where trade is no longer about manufacturing a product in one country and then selling it elsewhere. Transboundary cooperation served by different time zones and labor costs, as well as maximum market coverage of the important framework for trade exchange and will be the result of the interdependence of global economic values among them, rather than the development of laws on exports, imports and tariffs. A positive trend is that investment, transfer of technology, knowledge and best management practices will be transferred from place to place because of the economic values, capabilities and comparative advantages of developing and poor countries.

Undoubtedly, what economists have reached is a sophisticated concept that strongly urges the abolition of all possibilities that would have maximized "things" in the first place, at the expense of the potentials of "people" and of the different "ideas" of cultures. This means that what is firstly needed is the advancement of the possibilities of "people" and the ability of "ideas" to exploit "things" in proportion to the potentials and cultures of peoples. When things are preferred, there is a rapid development that is beautiful in appearance but

incomplete in its interior. But when peoples' ambitions are preferred and ideas are developed for their available resources, there is a balanced development that gradually progresses towards the summit because of the accumulation of knowledge and experience, and its appearance and interior are harmonious.

For example, the Arabian Gulf Countries are the largest oil exporters in the world through huge ports and giant barges, but in contrast, thousands of petroleum products in the world market are made up of very little. There are also developing countries with large conversion projects, but there is not a single car factory insight. Some countries also produce most of their freshwater through the world's largest desalination plants, but there are no educational or research facilities or industries and inventions to support them.

Most Arab countries have vast villages with the largest diversity in the world, but these countries did not benefit from the creation of village inventions or sand products and raw materials. These examples mean that thinking about things before qualifying people and generating ideas will lead to major problems. But how would it be if people and ideas were to take the lead in making things available within their culture and resources?

Today oil in Saudi Arabia is a "thing" to bring money so all the "people" and "ideas" on it primarily work to sell it. But if oil could be a "thing" based on the "thought" of turning all the "people" who are based on it from sellers to innovators, then oil would have a goal and a price. It is not very different when it has to do with culture and heritage, which is the surest "oil" for every society, no matter how poor. If we treat them as a "thing" of glory, it must be preserved and presented in museums and festivals or reproduced as it is, as it will not add to the progress or prosperity of society. But if we treat them as "thinkers," all segments of society, individuals and institutions, will try to generate innovation after innovation, product after product, making culture and heritage "something" important for progress and prosperity and dealing with them as competitive and creative.

2.7. Study Plan

After having reviewed the importance of the thesis in line with its cause and objectives and prove that culture and heritage are inspirations for development

through knowledge and experience. It was important to ask the following question: how do we think to make sense of cultural knowledge based on other experiences to create a novel conception? To answer this question, the researcher developed a planning philosophy of the thesis based on eight foundations each based on several pillars:

2.7.1. Perception: the explicit knowledge of culture

Understanding the culture-based innovation through explicit knowledge, such as research, induction, observation, and reasoning. This system as a whole can be called the perception foundation. This basis is important in understanding the subject of the study and the importance of the general concepts before going into the specialized concepts on which the outputs of the final thesis mentioned in the study can be determined. The first section is based on this foundation and its importance. The thesis contains six pillars: 1) Culture & Values, 2) Culture & Business, 3) Culture & Design, 4) Culture & Innovation, 5) Culture & Analysis, 6) Culture & Synthesis.

2.7.2. Apperception: the tacit knowledge of culture

Understanding the culture-based innovation through tacit knowledge is not only the explicit knowledge that supports the analysis and synthesis of ideas in ways that may be unhelpful or out of the box. This needs to explore cultural and heritage experiences on the one hand, and reflection, imagination, reasoning and knowledge of overlapping cultural relations and their causes on the other. This system can be called the apperception foundation. The researcher discussed four pillars within this framework to discuss the philosophy of culture through three different experiences, in order to try to form a knowledge base that provides creative cultural thought that stimulates the behavior of innovation and design. The experiences were distributed into three pillars: 1) The wisdom of Ibn-Khaldun, 2) The philosophy of Malik Bin-Nabi, 3) The thinking of Paul Schafer.

2.7.3. Augmentation: the speculative perception & apperception of culture

Enhancing the perception of the mind and expanding it towards the imagination and contemplation of finding new productive or cognitive solutions to culture and heritage through the outputs of the former founders, namely the fifth pillar

of the first foundation, the table of analysis and the formation of cultural models. The fourth pillar of the second foundation is a proposed mechanism to generate ideas about culture through twelve intellectual bases. This intellectual integration between the two founders was called the "augmented culture." This methodology makes it possible for us to analyze the input of cultural and heritage ideas and then reformulate them and incorporate them into new cultural identity outputs. The researcher called this system (the augmentation foundation). The researcher discusses four pillars within this third basis: 1) Culture components, 2) Culture approaches, 3) Culture knowledge, 4) Culture knowledge-Net.

2.7.4. Observation: the augmented culture through noticing

2.7.4.1. The hypothesis

In the study hypothesis, the researcher proposes four hypotheses to link development with the approaches of culture, its components, its implicit knowledge, and how the proposed network of knowledge can analyze the essence of culture and heritage and reformulate some of its components in order to adapt them to the society's needs and aspirations, namely the level of progress and prosperity. These assumptions achieve two things: first, to make culture and heritage a methodology of action and production to promote development plans. The second is to encourage creativity, innovation, invention and design based on innovative cultural and heritage initiatives, and to promote them to become competitive development projects: First hypothesis: the institutional approach, Second hypothesis: the practical approach, Third hypothesis: the theoretical approach and Fourth hypothesis: the conceptual approach

2.7.4.2. The case studies

The purpose of observations is to justify the four-hypothesis discussed in the previous topic through four case studies: [First observation](#), Hong Kong decision-makers maintain its sustainability through the approach of its identity through its own culture and heritage. [Second observation](#), the famous Muslim neighborhood in the heart of the Chinese city of Xi'an. [Third observation](#), a scientific exhibition entitled "One Inch of Kesi Silk, One

Ounce of Gold". [The fourth observation](#), the Saudi annual national festival of culture and heritage.

[2.7.5. Justification: peoples' opinions](#)

The participation of the community in expressing its opinion on the study after the researcher reached positive data regarding supporting development through cultural innovation. Therefore, the researcher must be guided by the views and ideas of intellectuals, while reinforcing the study and its future objectives. The researcher also wanted to see a segment of society around the National Festival of Heritage and Culture become generators of innovation and design in the field of culture and heritage. The researcher also wanted to feel the extent to which the festival organizers accept to upgrade it from an annual event to become a development project based on innovation, invention and design. Based on the above, this fifth foundation of the thesis included three pillars: 1) [Opinions of intellectuals](#), the researcher interviewed five intellectuals in different disciplines to know their views regarding the study objectives and the importance of culture-based innovation. 2) [Opinion of society](#), the researcher prepared the questionnaire from five chapters: Evaluating the festival in its current state, in case of development, prioritizing the activities of the festival, and Suggestions. 3) [Opinion of organizer](#), the researcher interviewed the deputy supervisor of the festival and expressed his opinion on the development of the festival to be the nucleus of an initiative supporting the development of Saudi Arabia by making it a platform for culture-based innovation.

[2.7.6. Discussion: the interpretation on study arguments and questions](#)

The researcher concluded by reading analytical and monetary development plans where the term innovation was extensively used in all development plans, specifically used with development and innovation, economy and industry, trade and investment, followed by the importance of creativity. It was used less in some development plans, specifically in education, culture and intellectual matters. Then the term talent emerged in recent development plans as a support for the knowledge-based economy. These important issues should be highlighted and interpreted in all that has been done from all five previous

foundations to establish an informative and interactive basis for the next implementation foundation.

2.7.7. Implementation: the contribution to the perfection of culture

The National Festival of Culture and Heritage has grown steadily in the last three decades, but the question is: does this growth have future philosophical and strategic goals in the field of creativity, innovation and design? Or is it a traditional national festival based on the use of culture and heritage in terms of preserving them and introducing people to them without investing them and supporting the national economy with them and creating a competitive global production? This proposed scenario will play a role in clarifying the various viewpoints, regarding which is deemed to be better in the future of the national development of Saudi Arabia.

2.7.8. Conclusion and Recommendation

Culture-based Innovation does not achieve much if there is no attractive and interactive knowledge that can be drawn from the notice and observation of daily life, both directly and indirectly. This may be inspired by the success of developments that rely on the principle of cooperation through its multiple vision of bringing knowledge from the social and cultural context, institutional framework, regulatory systems, infrastructure, etc. These are all factors that need to be collaborated in understanding and bringing knowledge into an effective decision-making framework that generates innovative products, services and systems. In this conclusion we will surmise that the Saudi National Festival for Heritage and Culture can become a cultural development model (*Janadriyah-Based Innovation*) of linking the past, the present and the future through the qualitative activities that can generate continuous creativity in the culture and emerge with plenty of innovations and designs. “Innovation is driven not only by what we know we do not know, but also by what we do not know we do not know” (Kao, 2007, p. 161)

2.8. Study Contribution

This thesis aims to extend creativity, innovation and design skills through reflecting on the cultures of societies in general, and the cultures that based on the values of Islam and Arab originality, such, Saudi Arabia in particular. Therefore, in this thesis, the researcher aspires to generate an Arab Muslim

thinker who is interested in innovation and design in general, and innovation and design based on culture and heritage in particular. This means getting the inspiration of excellence through the competitive exchange of ideas among the advanced societies and not through submission and cultural subordination to them.

The researcher unequivocally believes that there is a connection between cultures and religions, beliefs and values; the Arab Islamic culture and heritage are predominantly the products of the Islamic Religion. The more a culture attaches to religion, through constructive interaction and balanced thinking and reasoning, the greater the civilizational outcomes are likely to be. The best example of that is the Islamic Golden Age - from the eighth century to the fifteenth century. On the other hand, the more the Arab Islamic culture depends either on quoting from religion without reasoning or applies reasoning without obeying religion, the more its competitiveness becomes a weakness, vulnerabilities, and subordinate to other cultures, which we can best describe as the case of most Islamic and Arab countries today.

For, Islam in addition to being a monotheistic religion that calls for worshiping Allah and believing in all prophets from Adam to the last prophet and messenger of Allah, Mohammad (peace be upon them), it is also a religion that urges its followers to build up the earth and encourages them to do extremely well in every field. It also urges them to get to know nations of different beliefs and ethnicities at any time and in any place whatsoever for acquaintance and cooperation.

However, this thesis looks forward to activating this role through "culture-based innovation." Since studies on this field are limited and still in their infancy, the researcher found that this field of study deserves to be a Doctor of Philosophy. It is a fertile field for exploring and shaping new knowledge-based orientations. However, it is also a difficult field because the culture in its nature is constituted of various beliefs, values, and intellectual attitudes that differ from one society to another and from one civilization to another. On the other hand, there are many experiments and studies which prove that the activation of culture enhances the development of ideas in various fields, and these ideas stimulate the exploration of the innovations lying in the substance of material and moral

things. Therefore, the researcher discussed these perceptions through new intellectual aspects which distinguish this thesis:

First Aspect: Culture is a life system that affects the individuals' rational and behavioral attitudes in which they believe or to which they directly or indirectly belong. It is useless to study culture-based innovation unless the person who carries out the study does believe in the culture of which he wishes creativity, innovation and design to be born. Therefore, the reader will notice that the researcher revealed his cultural affiliation and intellectual attitude in the first part of the thesis in order to make the reflections of that, on the thesis' methodology, literature and results, understood. One might ask: this approach would make the benefit gained from the thesis limited and directed to those who belong to the researcher's culture. This perception is incorrect! The researcher's study is based, from the very beginning, on a fundamental Islamic principle that is well recognized in his culture and thought, which is the words of Allah Almighty (O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another) [49, 13]. So, communication and cooperation are mainly the researcher's objectives of this thesis.

Just as the researcher wanted to prove that the Islamic religion and its civilization have multiple components of achieving renaissance and supremacy, he also wanted in return to show for those who belong to his culture the sophistication and development of other cultures' ideas and thoughts and that we can interact with them to be inspiring for new ideas and projects, frequently mentioned along the thesis. Another matter of great importance and one of the researcher's priority concerns is that this thesis is carried out at an internationally renowned university, where the school of design is classified as one of the three best schools of art and design in Asia and ranked among the sixteen best schools in the world. Wherefore, the university's academic outputs will widely be browsed by interested people both locally and internationally. Therefore, the researcher had to introduce the reader to some of the most essential concepts of the Arab Islamic philosophy about religion, civilization and culture through some inspiring Arab pioneers, such as Ibn Khaldoun and Malek bin Nabi, which fosters intercultural communication and cooperation.

Second Aspect: culture promotes the development of renewed ideas in various fields; therefore, the researcher reviewed two fields to prove where culture was

credited with their development and the sustainability of ideas and innovations related to them. The first field is a culture with finance and business; the second field is a culture with design and how it is associated with creativity and innovation. Many interested young generations may not notice these two fields because they focus on their material outputs without reflecting on and exploring the intellectual non-material aspects.

In a related context, I remember a friend, who did not use to know much about the significance of Islamic Art and inscription other than naive perceptions and explicit knowledge. However, after he had graduated and obtained the doctoral degree, I was surprised that he invited me to conduct joint research in this field after he came to admire and be interested in the Islamic Art and inscription with his students. The reason behind this admiration was the intellectual discussion we used to have at the university, which the researcher considers to be at the “apperception” instead of “perception” level and as a “tacit knowledge” for Islamic moral thought instead of “explicit knowledge” for Islamic material art!

However, from this standpoint, the researcher is keen to elaborating on this field; as it is imperative in religious, cultural and heritage theses, and as there is no way to understand it through simple perceptions or the common stereotypical knowledge. Therefore, the reader will touch the importance of this topic in all parts of the thesis, and this is a new approach that characterizes this thesis.

Third Aspect: thinking about culture stimulate the exploration of the innovations lying in its substance. The complexity of the concept of culture in the modern era contributes to enriching the concept of culture which is formulating and circulating interactively as a result of the findings of various knowledge and social media on the one hand, and the big data, and the rapid technology and industry on the other hand. These and other circumstances that are unprecedented in the history of humanity made the concept of culture stand out, not only at the level of its definition and philosophy, as it was in the past, but also at the level of inspirational studies, innovations, design and imaginative thoughts.

This situation led the culture to move towards a universal interaction with all aspects of life, both moral and material, as explained earlier. Therefore, it was important for the researcher to give realistic examples that demonstrate what is

meant by culture-based innovation? By understanding the mechanism of exploring innovation within the substance of the culture's thought context. This led the researcher to study twenty-seven realistic projects and conclude, after analyzing them, several approaches that promote understanding of culture-based innovation, and encourage exploring more of them by observing and contemplating on culture and heritage through the daily life, by an interactive kind of thoughts, called in this thesis an "augmented culture." However, this approach is considered a new contribution by this thesis, which can be developed and utilized, as it is mentioned at the end of this thesis.

Fourth Aspect: The researcher, in this thesis, was also interested in the mutual intellectual complementarity among people, objects and ideas within the spirit of culture and heritage. These three components animate culture and heritage as a living being able to interact with people anywhere and anytime. Ibn Khaldoun spoke about this triangular relationship and its importance more than six hundred years ago. Then, Malek bin Nabi came to explain to us the implicit interactions of this relationship and how it could be positive or negative, which is very important for those interested in design and innovation! Therefore, it was essential to elaborate on this relationship and support it with other literature, the most important of which was Paul Schafer's literature on culture; which in his comprehensive cultural definition, he stresses the importance of complementarity between these components in a way or another to create a variety of material and moral attitudes that can give added value to the social, economic and political aspects for different societies.

From this point of view, the contribution of this thesis comes as an addition to the studies that appeal to development decision-makers to develop the behavior and skills of their societies through making use of their cultures and directing them towards innovation and design (perfection approach) and not being satisfied by merely showing their cultures and selling their heritage products' goods (curiosity approach). To clarify this point, the researcher suggested applying this approach to one of the most important annual celebrations of heritage and culture in Saudi Arabia, and he brought the views of some educated scholars, as well as the opinions of some of society. The results were very constructive, proving that culture and heritage need persistence communities, which can provoke thought that can generate

competitive outputs distinguished by originality and modernity. Therefore, the reader will find a new intellectual proposition of this topic based on four field studies along with the best practical alternative scenarios, which is a new approach that characterizes this thesis.

Fifth Aspect: In this thesis, the researcher is interested in linking culture and heritage with the national development of Saudi Arabia through scenarios. The reason for this is to find a new "intellectual approach," which will be explained under the topic of "knowledge gap." This approach is one of the new additions of this thesis, which is intended to highlight the following:

- 1) Diversification of the economy of Saudi Arabia requires thinking to transform the concept of culture and heritage from being a glory, originality and identity to being productive knowledge, innovative strength and competitive sustainability.
- 2) The knowledge-based economy policy adopted by Saudi Arabia needs various intellectual inputs, including values inputs, philosophy inputs, and the inputs of production that based on creativity, innovation and design. All these inputs would have either positive or negative outcomes according to the methodology adopted by the decision-makers in dealing with the culture and heritage of Saudi Arabia.
- 3) Innovation and design are two activities that are always oriented towards generating new products through renewed thinking and continuous development. The more their scopes of activity are expanded in the three cultural dimensions; past, present and future, the more the innovations would increase, and the design outputs would be diversified. Therefore, Saudi Arabia desperately needs an increasing and rapid activation of innovation and design.
- 4) When culture and heritage are considering as a experimental methodology for innovation and design, their significance as originality and modernity is different from being limited by definitions and theoretical visions. The experimental methodology creates a renewed intellectual and cognitive movement that highlights the strength of moral culture and its material outputs based on its historical depth and geographical diversity.

2.9. Study Limitation

The final outputs of this thesis will be part of a proposed "development model" to achieve the four objectives of the study. This proposed model was assumed to be applied to the National Festival of Heritage and Culture to promote it into a national heritage and cultural project based on creativity, innovation, invention and design. This model will be explained by Scenario Thinking, which was mentioned earlier because it is the closest cultural approach to which the proposed model can fit. Harvard Business Review notes in one of its publications that the script is a gentle art of perceiving the future as an alternative to predicting or guessing it. The scenario is a methodology tool for making decisions and developing future strategies that are appropriate to space and time. The scenario is also a planning tool that helps build an extended perspective in a world of mystery by understanding today's options that can be translated to understand future transformations. The scenario is an instrument for the Perception tool and the testing of individual or group expectations developed as future alternatives to the environment in its multiple axes. This scenario is also an art that helps to activate the aiming tool focused on all future aims. It is understood that the thesis is not one of its outputs to develop executive policies or structures of how to upgrade the festival from an annual event to a sustainable national project. It is not the outcome of the development of design perceptions or urban plans for the festival. And its outputs are also not to develop a cultural or heritage product where my eyes or servants were. All these things and the like can be achieved at a later stage if the decision-makers in Saudi Arabia want to activate this thesis and take it from its philosophical vision to the scientific vision of an operational process within a national project with a large budget and its national case.

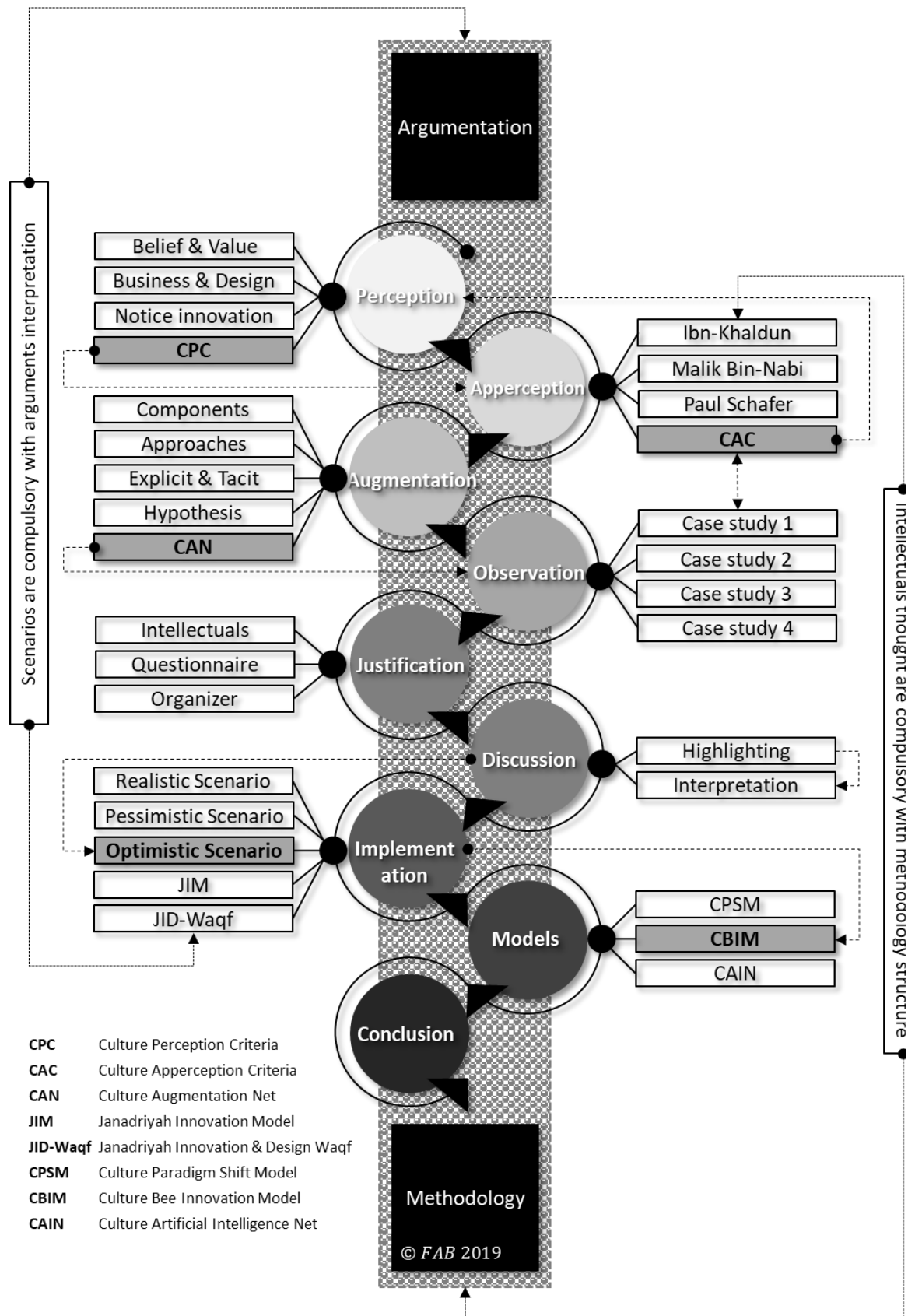


Figure 2.1 The Study Plan and Framework. Expanding the Saudi National Festival for Heritage and Culture into a National Cultural Project based on Design and Innovation. concept: Fawaz A. Bakhotmah., SD, PolyU, HK

Chapter Three

Study Methodology

- 3.1. Knowledge gap addressed
- 3.2. Seek new knowledge
- 3.3. Content analysis (perception, apperception & augmentation)
- 3.4. Observational Study
- 3.5. Interviews
- 3.6. Questionnaire
- 3.7. Knowledge Net
- 3.8. Scenario Design

3.1. Knowledge Gap Addressed

Most intellectuals of contemporary Arab Muslim scholars are urging to raise the awareness of generations thinking, to promote the development of their countries to elevate them to become among advanced countries in knowledge and industry, etc. such Abdul Karim Bakkar⁷², the author of the book (Building the Thinker) which wrote:

All people think, but there are huge differences between a person whose thinking is limited to solving the daily problems facing him/her related to his living and work causes and those elites who try to establish the principles for reading the past and benefiting from it, and try to establish the rules to understand the present and discover the relations between its driving forces. In my belief, a "thinker" attains a cultural mental rank higher than the "educated" and below the "philosopher" rank... the philosopher far thoughtful in the abstraction and the innovation of concepts and more occupied in major issues than the thinker, who is more understanding in such issues and the like than the educated. Hence, we can say that every philosopher is an thinker but not every thinker is a philosopher, and that every thinker is an educated but not every educated is a thinker. I shall keep emphasizing that the separation between all the above mentioned is inconclusive and that the overlap between them shall still be probable. The thinker navigates between formulating concepts, articulating visions, drawing up lessons and detecting norms, and between improving the reality and diagnosing the crises people suffering from. In addition, the thinker continually seeks to have dialectical relationship between his knowledge and intellectual reality, meaning that he preoccupies his mind about identifying the current problems, criticizing them and

⁷² Abdul Karim bin Muhammad Bakkar (1951). He is a Syrian scholar. He is one of the prominent authors in the fields of Islamic education and thought. He is renewing the presentation of various issues related to Islamic civilization and issues of renaissance, thought, education and advocacy. Dr. Bakkar has about forty books and over a hundred hours of audio recording.

attempting to find solutions, then, modifies his view of reality, his judgment of it, and the foundations of reforming it based on the data he comes up with following these processes. Thus, the thinker can be compared to the philosopher in that he/ she is always in continuous search of right system of thinking, and in his/ her feeling of uncertainty towards a lot of matters. This feeling staves him off pride and pushes him to continue searching, contemplating and learning⁷³. (Bakkar, 2009, p. 22)

Certainly, this intellectual aspect cannot be ignored when dealing with culture in general and with the Arab Islamic culture in particular! The author wanted to draw attention, through his interesting analysis, to the knowledge gaps that the learner, teacher and researchers in the Arab and Islamic world might not be aware of. These knowledge gaps can be multi-leveled and multi-disciplinary; For example, at the level of researchers, whom I one of, I find the hypothesis of Abdul Karim Bakkar an implicit message that there is huge shortage in methodologies of creating the explorer-and-productive intellectual in our Arab and Islamic environment, which is the result of a knowledge gap that requires developing remedial proposals for it! If so, this agrees with hypotheses put by the intellectual (Malik Bin-Nabi) who dwelt on clarifying the developmental problems of the Arab and Islamic world resulting from the lack of a complementary relationship between ideas, things and persons, whose principles were established by the historian Ibn-Khaldun six hundred years ago. It should be noted here that the knowledge gaps do not necessarily mean the lack of the qualifications or the outstanding people! The lack is rather in the methodologies of thinking that might help in bridging this

⁷³ The text in Arabic:

“كل الناس يفكرون، ولكن هناك فروقا كبيرة بين من ينصرف في تفكيره إلى حل المشكلات اليومية التي تواجهه في معيشتة وعمله، وبين تلك الصفوة من الناس الذين يحاولون توفير أسس لقراءة الماضي والاستفادة منه، كما يحاولون توفير قواعد لفهم الحاضر واكتشاف العلاقات بين القوى المؤثرة فيه.. في اعتقادي أن "المفكر" يتبوأ منزلة ثقافية وعقلية هي فوق منزلة "المثقف" ودون منزلة "الفيلسوف"... فالفيلسوف أبعد غورا في التجريد وفي إبداع المفاهيم وأشد اشتغالا بالقضايا الكبرى من المفكر، والمفكر أبعد غورا في هذه الأمور وأشبهها من المثقف، وهنا يمكن القول أن كل فيلسوف مفكر، وليس كل مفكر مثقف، وإن كل مفكر مثقف مفكر، وسأظل أؤكد على أن الفصل بين جميع من ذكرناهم هو فصل غير حاسم، والتداخل بينهم سيظل أمرا واردا. المفكر يتردد بين صناعة المفاهيم وبلورة الرؤى واستخلاص العبر وكشف السنن... وبين إصلاح الواقع وتشخيص الأزمات التي يعاني منها الناس، وهو يحاول باستمرار أن تكون العلاقة بين محصوله الفكري والمعرفي وبين الواقع علاقة جدلية، بمعنى أنه يُعمل فكره في تحديد المشكلات الراهنة، ويقوم بنقدها ومحاولة العثور على حلول لها، ويعتدل في رؤيته للواقع وفي حكمه عليه وفي أسس إصلاحه بناء على المعطيات التي يحصل عليها من وراء ذلك، ومن هنا فإن المفكر يشبه الفيلسوف في أنه يظل في حالة مستمرة من التلمس للمنهجية الصحيحة في التفكير، كما أنه يشبهه في الشعور بعدم الحصول على اليقين اتجاه كثير من الأمور، وهذا الشعور يعصمه من الكبر ويدفعه إلى الاستمرار في البحث والتأمل والتعلم”.

knowledge gap through promoting of exploration and production thought for the coming generations in all disciplines.

On this basis, the researcher's purpose was to build the methodology of this thesis on the basis of presenting new knowledge that helps bridging part of the abovementioned knowledge gap towards the building of the intellectual in the area of culture and heritage based design and innovation. Thus, the researcher considers, after his analysis of the knowledge material he collected and the deep discussions with the study supervisor, anyone dealing with culture-based innovation needs to have the ability to deal with multiple thought axes that help in recognizing, contemplating and discovering values, customs and traditions within religions and cultures, in addition to other thought axes that show how to benefit from experiences of cultural societies throughout history and the most important factors of intellectual and productive modern advancement these societies were built on.

Based on the foregoing, and after developing the theme of the thesis with the supervisor, and after taking the opinions about it, it was agreed to follow a methodology that comes under the cognitive orientations that help building new philosophical ideas about the strategy of culture-based innovation in the sense of improving this strategy to make it among the mechanisms of the countries' national development in general and the development of KSA in particular. It is important not to consider this strategy as a process of developing the cultural products only as is the case, to some extent, in some examples we have mentioned through Bellagio Mandala Group of Culture-Based Innovation. Theses on knowledge-based national development and culture-and-heritage-based innovation are still scarce and almost non-existent. Two matters should be taken into account in order to activate this orientation: the first one: a methodology that leads to creating thought that is able to deal with the thesis's issue from the perspective of apperception thought not only perception, which is a new knowledge orientation that is unique to this thesis. The second matter: to achieve the first matter to, it was necessary to dive in the fathoms of culture through three concepts: 1) knowledge diversity in the fields of culture and heritage, which was called cultural tacit and explicit knowledge, 2) culture understanding through its multiple approaches and it was named cultural approaches, 3) identifying culture and heritage levels, and it was named cultural components. The purposes of all these concepts are:

First: reflecting on "the world of values" of society, and observing it as data, information, knowledge and wisdom. The world of values is the religious, moral and social virtues - concrete and tangible – on which the human society life is based. In his book (The Unity of the Arab Culture), Mahmoud Shaker says "No culture can rise or grow unless it has a connection to a religion (values). A culture, in my opinion, is not but a manifestation of religion and religion, in its wider meaning, is the lifestyle for believers as it draws the path of life for them from cradle to grave, day and night, and it also draws for them its other general images in the afterlife. Religion is the one that gives life its meaning and provide us with frame within which we can express our hopes and ways. Religion protects human communities from despair and boredom"

Second: Understanding the "world of things", material and moral, and deducing the "world of ideas" revolving around it. Malek Bennabi clarifies that there are two types of ideas: a dead idea and a fatal idea! A dead idea: is one that betrayed its cultural backgrounds and diverted from its ideal, thus it has no roots in the original culture. A fatal idea: is the one that lost its cultural value and identity after it has lost its roots that remained in their original cultural place. These two matters are among the philosophical spectaculars that should be included in the methodology of anyone interested in culture-based innovation. The researcher wants to highlight that this purpose does not mean to start from the world of things in order to get to know the world of ideas, as the contrary can be true; we can start from the world of ideas in order to reach the knowledge of the world of things. Both cases will enrich the thought of the researcher in the field of culture to deduct many concepts and wisdoms that can generate modern outputs carrying the spirit of advancement and the society's identity.

Third: creating an intellectual who is able to realize the complex interconnectivity between knowledge, aspects and components of culture (Culture Apperception) accompanied with continuous search for qualitative enhancements between this perceived complex interconnectivity that helps interpreting it to designs and innovations (Culture Augmentation). Regarding this interconnectivity, (Naguib Mahfouz) says: "thinking of future rise from the present and relates back to the past as the past, the present and the future are one connected inseparable current". Thus, the culture that is based on this thought is a meaningful culture rich with its,

content, knowledge, colors and tunes, creating within all its components the spirit, the mind, the insight, the attitude and the behavior of a human.

Based on the foregoing clarifications, the methodology of this thesis has been built. It will be noted that the new knowledge brought by it is that it deals with culture and heritage as a sustainable and renewed generator of many concepts, ideas and products. The researcher sees that the use of the expression (apperception) as more harmonious with culture and innovation for understanding of their definitions and multiple relations, and more comprehensive of their overlapping input and patterns' perceptions through the past, the present and the future. Moreover, the use of the expression (augmentation) helps finding ideas, developing solutions and deriving every new through an innovative thought that deals interactively with the past's proficiency, the present's technology and the future's informatics.

3.2. Seek new knowledge

The research methodology is the backbone of scientific studies that seek new knowledge to prove or develop through the aspiration of those who are involved in all scientific disciplines or practical fields. Therefore, the methodology uses a package of inspirational ideas, proven practices, and multiple experiences, which can be put into documented scientific work based on coherent, consistent, accountable and repeatable work. This action is often a specific approach, based on an issue that has its own justification and has some sort of organization. Therefore, it is important for the methodology to be clear in the ways of obtaining data, information, knowledge and judgment, and also clear in its analysis and compilation through the theories and procedures and techniques recognized or to be accessed. Based on the above, the researcher in the first section gave a complete idea of the new innovative model. This model is "culture-based innovation". The researcher wants to emphasize the importance of this model and the possibility of developing it, as well as to benefit from it in developing some developmental solutions that need creativity, innovation and design. Chapter Two discusses four important development issues in Saudi Arabia's cultural and competitive process, and how the "culture-based innovation" model can interact with them as a practical application that demonstrates the model's ability to participate positively in promoting current development issues and future visions. Both previous sections provide a clear explanation of the issue of the thesis and

justify the choice and knowledge that the researcher wishes to develop. The organization of the thesis and how to accomplish it has been generally addressed in the topic of the study outline and the knowledge gap addressed above. However, this scheme cannot be accomplished without a clear methodology within a template that promotes the activation of culture-based innovation as knowledge inputs and practical outputs that can be used. Before discussing the details, it should be clarified that the thesis was based on the qualitative approach that can be explained as follows:

Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. (adapted from Creswell)
(Creswell, 2009)

This approach has four basic rules that the researcher follows: First, to clarify the extent of the researcher's interest in the subject of the study, in order to reach the crux of the main study. This basis is clearly shown in the first section. The most important conclusion of the researcher after reviewing the importance of culture in the fields of business, design and innovation is: How can we understand projects that are related to culture and heritage on the one hand, innovation and design on the other? To answer this question; the researcher studied twenty seven projects, which are in one way or another related to culture and heritage. He concluded by analyzing them into the way that stimulates thinking about innovation and design through cultural and heritage data. Second, the detailed issue of study, so the researcher devoted the second chapter to the issue of study, which was built on three pillars: 1) social basis, it is assumed that there are four developmental issues needing innovative solutions. 2) A research basis that proves that development plans do not provide conclusive evidence of the responsibilities or what will be done by the state. This evidence led the researcher to explore the four issues within nine development plans for Saudi Arabia, through which he found that there is already

a lack of innovative thought and design around them, which weakens their output.

3) Cultural Foundation, which is among the four issues: hazy culture and heritage mode! Being an important matter that has its overlaps with the other three issues, making the researcher think of promoting this issue based on innovation that is culture based and starting through it as a means of promoting other development issues. In addition to the "culture-based innovation" model, the researcher reviewed two other topics that he found inspiring, the first being a developmental model and the other being economic theory. The development model is an "innovation-driven development strategy", a model pursued by China in all areas of its development, including its culture and heritage. The theory is based on the new economic orientation proposed by economist Justin Yifu Lin, called "New Structural Economics", which relies on harnessing the resources of poor and developing countries, however limited, in building their economy, including exploiting their cultural and heritage resources that they enjoy and distinguish them from others. This cannot be achieved except by distance or from relying on the economic theories of developed countries or working to adapt them. Lastly, after all these rules the researcher has full awareness of the issue or problem that he is dealing with and his ability to generate unconventional questions through which the study can be developed in the field of culture and heritage.

3.3. Content analysis (perception, apperception & augmentation)

Content analysis is the systematic description of the form and content of written, spoken, or visual materials expressed in themes, patterns, and counted occurrences of words, phrases, images, or concepts. (Hanington, 2012) Content analysis has two primary approaches: Inductive and Deductive. One may ask: **Is content analysis qualitative or quantitative research?** However, "it is basically used to analyze and study the cause and effect relations. Content analysis is a combination of qualitative and quantitative research, it is an intersection of qualitative and quantitative methods." (Latha, 2016)

This methodology was chosen for dealing with the collection and analysis of data and information from any source: literary works, works of art, works of the environment, audio works, food works ... with the possibility of classifying and arranging them and understanding their meanings and relationships in accordance with the objectives of the study. However, the accuracy in this methodology is in

the knowing and understanding of the parts that make up these works and their components. In literary works, for example, content analysis can deal with words, sentences, terms, and concepts that are repeated, which helps to understand the topic and determine the importance of its apparent and implicit paragraphs and objectives. In other words, this methodology is at the top of its productivity when it is treated with all five senses as a search engine, and sensors to receive information (perception).

It is at the top of its interaction when the mind deals with it as a means of understanding the interdependence of relations and the exploration of meanings (apperception). It is at the top of its competitive performance when it deals with it as a mechanism for merging information, concepts and relationships to generate new ideas, innovations and knowledge based on objectivity in all of the above-mentioned information gathering, and understanding of the relationship between them. It is therefore a very appropriate methodology for deeper understanding of culture and heritage, as the first objective, and as a thinker promotes creativity and innovation. The researcher who uses this methodology must maintain a specific vision in the formulation of concepts and ideas in proportion to the objectives of the study. Writing content based on this flexible methodology can take many writing styles without being influenced by the underlying content.

3.3.1. Inductive Reasoning

Searching and continuously collecting data, information and ideas (explicit) from a single knowledge source or multiple sources: this research aims to gradually reach general principles and holistic relationships that enhance the cause of the study. The research method is focused on information that is a common theme, accessed by the classification of words, phrases or meanings. In the course of this approach, the researcher knows that he is moving in the new knowledge configuration from the part to the whole, from private to public, from simple to obvious to overlapping difficulty. This means that the collection of data and information is a gradual step by step process to reach more professional scenarios through which to give general provisions or decisions. Professionalism cannot come from reading but must be from all five senses as previously mentioned, especially when it comes to developmental or cultural issues. There is no doubt that perception at this stage is very important in the

formation of basic understanding of such issues within their religious, moral and cultural contexts, which should not be static but dynamic as they can change at any moment based on external influences on the senses. It is important to quote what Ibn Khaldun said in this regard in what he knows as the (man's intellectual), which is:

the understanding of the things that exist in the outside world in a natural or arbitrary order, so that he may try to arrange them with the help of his own power. This kind of thinking mostly consists of perceptions⁷⁴ (tasawwur⁷⁵). It is the discerning intellect with the help of which man obtains the things that are useful for him and his livelihood and repels the things that are harmful to him. (Ibn Khaldun, 1377)

The inductive was used in most literary readings of this study. It was also used to read nine development plans for the Kingdom of Saudi Arabia, to learn the merits of four important development issues discussed in the second section under the subject of the study argument:

- A. Vulnerability of production diversity,
- B. Vulnerability of knowledge economy,
- C. Vulnerability of creativity, innovation and design,
- D. Vulnerability of culture as added value.

The extrapolation approach allowed the researcher to form a complete conception of the above issues which can be found in the appendix. This report would not have been followed by tracking the components of the four issues in each development plan that have accumulated and became a complete vision that can be based on the in-depth culture and heritage discussions of this thesis, as well as the future ideas it proposed.

3.3.2. Deductive Reasoning

A sequential realization of the concepts and meanings of what is gathered from the tacit information and ideas through which to establish or extract a certain

⁷⁴ Perception is "the sensibilia that are perceived by the five senses" and is "not accompanied by judgment." Or "the awareness of something through the senses."

⁷⁵ *tasawwur* is an Arabic terminology which is equivalent to *perception* as Franz Rosenthal's translation through THE MUQADDIMAH of Ibn Khaldun.

ray of light through the means of knowledge. All opinions before the cognitive conclusion are theoretical data in an environment of material or moral needs no more and no less. But after the conclusion or the development of opinions turn out to be within the framework of convictions and assertions, it is important that the researcher is aware that the context of the inductive approach differs from the context of the deductive approach?!

Firstly, we pointed out that the researcher moves in the formation of knowledge from the part to the whole, from the private to the public, but in the second context it is quite the opposite. The researcher moves from the whole to the part, from the public to the private, from general public knowledge to specialized tacit knowledge. Which is important in creating a philosophical depth in understanding the relations as well as in a complex way of understanding one issue or multiple issues within a single or multicultural environment. The researcher finds that the mark Ibn Khaldun has referred to this through what he knows as the (experimental intellect), which is:

the ability to think which provides man with the ideas and the behavior needed in dealing with his fellow men and in leading them. It mostly conveys apperceptions⁷⁶ (tasdiq⁷⁷), which are obtained one by one through experience, until they have become really useful. (Ibn Khaldun, 1377)

The deductive approach was used in the analysis of twenty-seven projects in Chapter Four of Part One because it is a good model for understanding the concept of culture-based innovation. The knowledge of this concept cannot be imagined, nor can it be strengthened by only reading some real projects and understanding their concepts and ideas, nor by observing its philosophical proposition which illustrates the ramifications of the infinite culture in it, also noting its innovative ideas that come from different sources and ideas according to its clients. All cognitive conclusions within the context of the deductive approach of these projects have been noted. It is important to note that these

⁷⁶ Apperception is "the judgment that a thing is so" and the "ability to think that may try to obtain the desired (information) by combining the universals with each other, with the result that the mind obtains a universal picture that conforms to details outside.

⁷⁷ *tasdiq* is an Arabic terminology which equivalent to *apperceptions* as Franz Rosenthal's translation through THE MUQADDIMAH of Ibn Khaldoun.

projects analyzed have nothing to do with the four case studies that will later be reviewed in Chapter Six. These seven projects are intended to deepen the understanding of the philosophical data on culture-based innovation. The four case studies in Chapter 6 are to establish assumptions from the literary readings of the three scholars: Abdulrahman Ibn-Khaldun, Malik Bin-Nabi and Paul Schafer, on which the study has been adapted on their ideas and cultural views through the use of the deductive approach to read their knowledge products to access the literature of the thesis in Chapter 4. This is where we mentioned that these three scholars have visions and ideas of unconventional culture, and how to understand and deal with them, make the most of them and activate them. This needs to be developed to achieve the researcher's aspirations to find a more comprehensive knowledge model on how Culture-Based Innovation corresponds to stimulate the thought towards a new reading of the culture to make it a platform for innovation, invention and design. However, it is impossible to stimulate thought towards a new reading of culture and heritage until to: First, we have a vision that strengthens the relationship between religion, history, industry, science, civilization, and cultural and heritage products. Second, the formulation of the product within a specific cultural concept to act as steps to generate multiple production models that can be used within one or more of the approaches to culture. Third, activate the cognitive vision and the productive models that have been achieved by choosing one of the three starting generators based on the realm of things, persons or ideas, according to the characteristics of the product, whether physical or moral, or both.

3.3.3. Abductive (Inductive & Deductive) Reasoning

An understanding of the interdependence and interrelationships between the four study issues, as well as the culture and heritage is necessary in perceiving both the previous two approaches so that new ideas can be generated. It is a sophisticated intellectual principle in the imagination, contemplation and expansion of concepts of tangible cognition in line with what Ibn Khaldun calls the (speculative intellect), which is:

the ability to think which provides the knowledge, or hypothetical knowledge, of an object beyond sense-

perception without any practical activity going with it. It consists of both perceptions and apperceptions (tasawwur and tasdiq). They are arranged according to a special order, following special conditions, and thus provide some other knowledge of the same kind, that is, either perceptive or apperceptive. Then, they are again combined with something else, and again provide some other knowledge. The end of the process is to be provided with the perception of existence as it is, with its various genera, differences, reasons, and causes. By thinking about these things, (man) achieves perfection in his reality and becomes pure intellect and perceptive soul. This is the meaning of human reality (Ibn Khaldun, 1377)

Based on this approach, the collection of information was expanded to verify two things:

First. To promote the concept of culture and heritage as one of the developmental work methodologies that enhance production and processing capacity, and to contribute to the development of non-traditional solutions to the various general development issues, and the four issues related to this Study. The importance of China's innovation in all fields, including the activation of innovation based on culture and heritage, as well as pushing for the activation of the potential of "people" and the ability of "ideas" to exploit available resources, including culture and heritage, commensurate with available resources and capacities. Based on this, the researcher developed four assumptions that reinforce these two approaches: First, the quality of urbanization and its multiple outputs depends on the efficiency of the institutional approach, which enhances the importance of culture, heritage and values, and the understanding of the material and moral approach. Second, the physical and moral sense of culture and heritage within the life of everyday societies depends on the ability of society to activate its own "realm of things", "realm of ideas" and "the practical cultural approach. Third, the qualitative development of culture and heritage and the related sciences

and crafts depends on the extent of interest in public and university education within the framework of new scientific visions that are in line with the cultural theoretical approach. The fourth virtual culture and heritage can participate in addressing the developmental challenges (economic diversification, activating the society and the knowledge economy, creating a policy for designing and practicing it, creating innovations stemming from culture, heritage and crafts) through the cultural conceptual approach.

Second. To upgrade some of the current cultural and heritage initiatives in Saudi Arabia to be development projects based on the industry of creativity, innovation, invention, design and education. One of the most important initiatives taken by this study as a goal is the initiative of the National Festival of Heritage and Culture, which is over three decades old. This has to be guided by the views and ideas of the intellectuals, while strengthening the researcher's view towards innovation based on culture, as well as the knowledge of a segment of society regarding the promotion of some national festivals to be generators of innovation and design in the field of culture and heritage. The researcher also wanted to sense the extent to which festival organizers accept the idea of upgrading some festivals from an annual event to a development project based on innovation, invention and design. In order to verify the defaults, the researcher had to conduct an observational study so that he could link the development with the cultural inputs, components, and implicit knowledge that were previously discussed. It was also necessary to interview intellectuals in different disciplines to learn about their views on culture-based innovation as part of the objectives of the development decision-making of Saudi Arabia and prepare a questionnaire to evaluate the festival in its current state and in the case of its development and thereafter stand up to the organizers of the development of the festival through an interview with the deputy supervisor. This information will help build the knowledge network that will be discussed later in this thesis. It is important to know the essence of culture and heritage, to analyze and reformulate some of their components, to adapt them to the

needs and aspirations of the community, and the level of progress, prosperity and innovation.

3.4. Observational Study

A fundamental research skill, to understand the situations and behaviors through the experience of membership participation in an activity, context, culture, or subculture. It requires thorough examination and systematic recording of phenomena— including people, artifacts, environments, events, behaviors and interactions. The observational study is more general vs participant observation or field research or ethnographic research or case studies. The fields of observational studies are various places requiring different tactics; public places, formal organizations, informal groups and communities. (Latha, 2016)

Observational Study; The purpose of which is to study the four hypotheses of the study by observing the attitudes and behaviors within a chosen place. It is important in this methodology to use a relationship with the specific place of study, which has the ability to establish friendships in the vicinity, to consult with the participants or ask them questions after the completion of fieldwork. The quality of the observations of fieldwork depends on the quality of writing in a simple and clear concept with as much as possible abstract general scientific concepts, with the possibility of interpretation of these observations based on:

First. The knowledge level determined by the amount of data, information, knowledge and wisdom studied on the subject of the study through the standards of creativity, innovation and design that motivate thinking out of the box.

Second. The cognitive level, which is the analysis and synthesis of data, information and knowledge obtained from the level of knowledge through some of the stimuli, including: understanding beyond the simple knowledge and intuitive (Apperception). Ability to analyze between unit and diversity through multiple cultural terminologies (Analysis). It is expanding information related to culture and heritage so that its sources will be varied to produce new information (Augmentation).

Third. The interactive level always works on finding logical structures and assemblages between objects, ideas, people and the environment based

on cultural and heritage identity (Synthesis). Understand the information about unknown or known issues and invest them in completely new outcomes (Understanding).

The case studies chosen to justify defaults, already referred to in chapter two, will be explained in detail in chapter six. The importance is short and in the order of defaults: 1) support for culture-based innovation through institutional encouragement of Hong Kong Province. 2) The activation of culture-based innovation through the practices of the Muslim community of its values and food habits within the famous Muslim neighborhood in the Chinese city Xi'an. 3) The use of culture-based innovation to revive China's ancient silk industry, which China has known for thousands of years through interdisciplinary approaches at the level of research and graduate studies. 4) Harnessing cultural innovation as a mechanism to promote the National Saudi Festival for Heritage and Culture. From traditional to pioneering ideas, from ceremonial aspects to production and manufacturing, from simple visions of limited goals to national visions of productive projects, and from employment seeking thoughts to employment creation thoughts, all of which will benefit decision-makers in thinking of many festivals and events that can be promoted and be generators of creativity, innovation and design.

3.5. Interviews

Interviews are a fundamental research method for direct contact with participants, to collect firsthand personal accounts of experiences, opinions, attitudes, and perceptions. (Hanington, 2012) We mentioned earlier that it is possible to upgrade some of the current cultural and heritage initiatives in Saudi Arabia to be development projects based in the industry of creativity, innovation, invention, design and education. But is the researcher correct in his thinking? Do the convictions reached by the researcher that the activation of Saudi culture and heritage through the channels of innovation and design help to create platforms for diversification of the economy and new production? Therefore, the researcher should use the methodology of interviews with Saudi experts with scientific and practical experience to learn their opinions, and determine whether they are consistent with the researcher's trends or whether they are reserved? Therefore, the interview with five experts will be reviewed in Chapter seven, which delves into the four developmental issues and the importance of innovation based on culture

to be part of decision-making during the upcoming period for the development of Saudi Arabia.

3.6. Questionnaire

Questionnaires are survey instruments designed for collecting self-report information from people about their characteristics, thoughts, feelings, perceptions, behaviors, or attitudes, typically in written form. (Hanington, 2012). There is no doubt that the main beneficiary of the outcomes of such theses - if applied - is the society in general. This is for a number of reasons including the interest of governmental and private organizations in the culture and heritage towards the communities for one reason or another. Many members of the communities are in one way or another involved in cultural and heritage activities. Education, progress, culture and heritage are content filled with ethical values, arts, customs and traditions that influence societies and are a gold mine for research and studies. This means that the community is aware of culture and heritage in varying degrees, ideas and various contents. Perhaps societies can be included in decision-making that has to do with culture and heritage, as they usually have some information about it, depending on the effectiveness of the previous elements in the community. In this context, it was necessary to take a segment of the society through the questionnaire for the purpose of developing a strategy for the National Festival of Heritage and Culture to be one of the platforms of innovation and design in Saudi Arabia, specifically about evaluating the festival in its current state and in the case of developing it. The views of society will be reviewed in detail in chapter seven.

3.7. Scenario and Future

“A scenario is a design in itself.” It is “considered as an experimental stage set for design and planning practice, and a conceptual framework for disciplinary development.” (Jonas, 2001) The scenario is one of the best methodologies by which the importance of design can be communicated to decision-makers who are still ignorant of design possibilities in multiple life areas and their ability to create a competitive environment. Wolfgang points this out:

Design is not art because it does not aim at individual expression... Design is not technology because it deals with fuzzy, discursive criteria rather than objective criteria...

Design is not science because it does not offer new explanatory models of reality, but changes reality more or less purposefully... Obviously, design is something very special.
(Jonas, 2001)

Therefore, study of a reality, and the development of future visions, can only be achieved through the scenario because it is an enthusiastic approach to decision making, a more interactive approach to goal setting, and a thought consistent with dynamic innovation and design because it is an art that deals with creative leadership data, changing societal trends and potentials, and also dealing with the output of literature and science. The scenario achieves amazing results when based on specific visions and uses effective tools based on them. Therefore, the visions and tools for describing a future reality cannot be through one scenario, so scenario experts agreed that the development of three scenarios to know the future prospects is the best and closest thought to the fact that it paints The future in all its directions.

For example, if we want to know the impact of the culture and heritage of a society in the development of its economy and its future innovations, we will have at least three scenarios:

Scenario 1: Culture-Based Festivals (Realistic Scenario)

This scenario aims to show the contemporary state's concern of its originality through highlighting its history, culture, identity and reviving its diverse heritage in line with the requirements of the political establishment in prompting national belonging, medially rather than productively. This scenario is "stable but traditional development" culture and heritage are used to the values of traditional heritage boasts of the community without investment and support of the knowledge-based economy and creating a global competition.

Scenario 2: Culture-Based Economy (Pessimistic Scenario)

This scenario is harnessing originality, to make use of it as an "economic resource". This scenario has a frustrating future in the medium and long term because its goal is to trade in culture and heritage through its old products without interest in developing it into innovations, inventions, and designs, which causes the depletion of the society's cultural and heritage capabilities as a result of weak and unthought methods.

Scenario 3: Culture Based-Innovation (Optimistic Scenario)

This scenario considers an intellectual cultural mechanism that supports innovation, creation and designing. It is a creative development scenario for the future. It achieves through non-traditional perspectives or ordinary thinking, which may be intelligently activated by religious, social, heritage and other values. In other words, this scenario activates society through its potential, opportunities and its own resources.

Therefore, when we develop a range of potential scenarios, as mentioned above, we can touch on the quality of life that people want by creating multiple opportunities for production and diversifying their sources, rather than dumping the market with a quantity of imported goods and accessories, while looking at life from a purely consumer perspective by adapt the culture and heritage towards innovation, design and production. However, the scenario is a scientific and practical force, exploring the worlds of the future from multiple angles, including positive and negative. The scenario has the ability to answer non-traditional questions and everything that is more difficult to learn about "living forces and critical uncertainties". Both of which are important outcomes of the scenario: they are the potential things that can make a big difference in the future, the variables that have the ability to change the future in ways that are influential but difficult to predict. They are also important factors in people's lives and because of their fluctuation there are major changes in the society, so their future must be predicted for 10 years or more: Social, Technological, Economic, Business methods, Natural resources, Demographic, International, Legal and Environmental. It is also important to note that the driving forces and critical uncertainties determine the outcomes of the final story of the scenario, and that they often appear clear to one and unclear to the other. The scenario is also different from other methodologies in the development of perceptions of the future, where it heavily depends on the conditions of the surrounding environment more than the internal environment conditions of the issue addressed by the scenario:

The inside-out perspective makes it difficult to predict changes in the marketplace that have not already become evident. To anticipate these changes, it is necessary to start by looking at the driving forces that may have an impact on

what happens in the arena affecting the business of the organization. Long-term developments in the arena very largely depend on driving forces in the surrounding world. Therefore, the natural starting point for tracking is trends in the surrounding world. (M. Lindgren, 2003, p. 56)

By linking the scenario to the issue of the thesis, we say that the Saudi National Festival of Culture and Heritage in three decades has been growing steadily, but does this growth have future strategic development goals in the field of creativity, innovation and design? Or is it a huge national traditional festival based on the use of culture and heritage in terms of preserving them and introducing people to them without investing them and supporting the national economy by creating a competitive global production of them? Here comes the role of the scenario, which explained some of the most important aspects of the above, by clarifying the multiple views, and which is better in the future of the national development of Saudi Arabia. Culture and heritage as a philosophy of festivals and events? Or culture and heritage as a philosophy of innovation, design and production? Undoubtedly, the study of the National Festival through cultural innovation, specifically through the fourth chapter of culture for the purpose of upgrading it to a development project will be one of the best examples in Saudi Arabia that can convey a message to the makers of the villages in Saudi Arabia. It will entail the importance of shifting from traditional ideas to pioneering ideas. This is from the review to production, from simple visions to national visions. The reason for this is that there are many festivals and events that can be promoted and are promising production platforms based on creativity, innovation and design.

Chapter Four

Apperception of Culture

- 4.1. Ibn-Khaldun (1332-1406) "Big Data of Culture"
- 4.2. Paul Schafer (1937-) "Analysis of Culture"
- 4.3. Malik Bin-Nabi (1905-1973) "Synthesis of Culture"
- 4.4. Culture Apperception Criteria (CAC)

Abdulrahman Ibn-Khaldun (1332-1406) was the discoverer of the theories of history and the founder of sociology six hundred years ago. Malik Bin-Nabi (1905-1973) was the author of the philosophy of the three cultural realms: the realm of things, the realm of people and the realm of ideas in the middle of the twentieth century. Paul Schafer (1937) is a cultural thinker, proposing ideas for transition from the world of economics to the world of culture in our present time. Thus, we will review the ideas of these three scholars about culture in a way that can motivate our thoughts towards a new reading of culture that makes it an arena for creativity, innovation, invention and design. It is important to bear in mind that the meaning of “new” as something that the eye has not seen before may be an inaccurate belief! However, there is a wisdom by the German philosopher Arthur Schopenhauer, who said: "The task is not so much to see what no one has yet seen, but to think what nobody yet has thought about that what everybody sees."

4.1. Ibn Khaldun⁷⁸

Abdulrahman Ibn Muhammad Ibn-Khaldun (1332-1406) was an Arab-Muslim scholar. He acquired deep experience in scientific, practical, social and religious life. His experience varied between an emigration that taught him more about people, imprisonment that made him aware of the cruelty of injustice, and close relations with the rulers that made him know the mysteries of the palaces. Ibn Khaldun did not despair in life, despite the hardships and sorrows he faced. The most difficult of which was the loss of his entire family that drowned at sea, while he awaited their arrival in Egypt; his last destination where he worked, lived, died and was buried. Despite life's joys and sorrows, Ibn Khaldun did not leave the world without new knowledge, which is summed up in his famous book "THE MUQADDIMAH" of Ibn Khaldun, which is a summary of many of his ideas and writings.

THE MUQADDIMAH of Ibn Khaldun has been translated into numerous languages, the most recent of which was the Chinese translation published in 2015 by

⁷⁸ Abū Zayd ‘Abd ar-Raḥmān ibn Muḥammad ibn Khaldūn al-Ḥaḍramī (1332 – 1406) An Arab scholar of Historiography, history, Sociology, Economics, Demography and Political science. Ibn Khaldun is the first founder of sociology before Auguste Comte. He is best known for his book, the Muqaddimah or Prolegomena (Introduction). The Muqaddimah (Introduction) is considered the first book of “The Kitāb al-‘Ibār” divided into seven books.

Professor Li Zhen Zhong⁷⁹ (1937), this translation is said to have taken ten years to complete all this time and effort was because he was obliged to investigate many sciences and disciplines that could make him understand Ibn Khaldun's rich thoughts and scientific purposes related to the social, economic and political conditions. However, for the main reason behind the translation, Li says that it is out of a need for the academic arena and the modern Chinese renaissance for such thought, philosophy and culture like that of Ibn Khaldun, because it embodies many important concepts and theories that keep pace with the times⁸⁰. On the other hand, Ibn Khaldun's *THE MUQADDIMAH* has been dealt with in study, analysis and criticism through a variety of channels at the level of education and writing, research, seminars, conferences and in master and doctoral thesis.

Therefore, the number and diversity of publications on Ibn Khaldun are innumerable. They are not only published by Arabs and Muslims, but also by academics and scholars around the world. Arnold J. Toynbee⁸¹ (1889-1975) writes of Ibn Khaldun that he "came up with the greatest work of which no thought had ever been reached in any time and in any country." (Latif, n.d.) Walter J. Fischel⁸² (1902-1973) says, "When Ibn Khaldun decided to leave this treasure (definition) to the generations that followed him, he realized that his extraordinary choices in his life full of images and lessons deserved writing." (Latif, n.d.) Ibn Khaldun is considered one of the most important late Arab Muslim thinkers who felt the deterioration of the Islamic Caliphate that its sun began to set and put an end to its golden age. It is not surprising that a Muslim scholar, such as Ibn Khaldun, has come to describe its situation and study its status through the concept of social studies and *al-'umrān*, to imitate the building of the State, its prosperity, then its decay and collapse, discovering many realist theories and data of "*al-'umrān*", which will be presented in this thesis for the importance to the methodology of this study.

⁷⁹ A Chinese Professor of Arabic language and Islamic culture, the Beijing language and culture university.

⁸⁰ Interview with Professor Li Zhong at "Without Borders" program through Al-Jazeera channel 03/29/2017 (<https://www.youtube.com/watch?v=2d2ma13Udlk&t=124s>)

⁸¹ A British historian, philosopher of history, research professor of international history at the London School of Economics and the University of London and author of numerous books (https://en.wikipedia.org/wiki/Arnold_J._Toynbee)

⁸² An American scholar and author of *Oriental Jewry and Islamic civilization*. Berkeley, California (<http://www.iranicaonline.org/articles/fischel>)

Ibn Khaldun was an "educated scholar who was well versed in all the knowledge, sciences, arts and literature of his time".2015 (حمداوي)) He also discussed history and philosophy with an innovation that had never been done before. Many historians, writers, scientists, and interested people consider Ibn Khaldun to be the founder of "sociology" and the "science of the human al-'umrān"⁸³ five centuries before that science could be ascribed to Saint Simon, Auguste Comte and Emile Durkheim.2015 (حمداوي)) There are also many terms that can be inferred from Ibn Khaldun's knowledge referring to the elements of knowledge that any scholar or interested researcher would like to reach through the "Muqaddimah" of Ibn Khaldun about the science he founded six centuries ago:

When I had read the works of others and probed into the recesses of yesterday and today, I shook myself out of that drowsy complacency and sleepiness. Although not much of a writer, I exhibited my own literary ability as well as I could, and, thus, composed a book on history. In (this book) I lifted the veil from conditions as they arise in the various generations. I arranged it in an orderly way in chapters dealing with historical facts and reflections. In it I showed how and why dynasties and civilization originate... I corrected the contents of the work carefully and presented it to the judgment of scholars and the elite. I followed an unusual method of arrangement and division into chapters. From the various possibilities, I chose a remarkable and original method. In the work, I commented on civilization, on urbanization, and on the essential characteristics of human social organization, in a way that explains to the reader how and why things are as they are and shows him how the men who constituted a dynasty first came upon the historical scene. As a result, he will wash his hands of any blind trust in tradition. He will become aware of

⁸³ Most of the works dealing with Ibn Khaldun always refer to this.

*the conditions of periods and races that were before
his time and that will be after it. (Ibn Khaldun, 1377)*

We understand from this quote that Ibn Khaldun was creative. Among the qualities of the creative is to look to the future in connection with the present and the past together, in contrast to most people who look at the present that is associated with the past. (Asaad, n.d.) Therefore, Ibn Khaldun was someone of a "long vision" based on his ability to establish relations through analysis and synthesis of the many sciences of his expertise. In confirmation of this, Mohammed al-Ansari says about (Ibn Khaldun) in his sixtieth anniversary "I was given an academic year to teach "Ibn Khaldun" to elite postgraduate students at the Arabian Gulf University in Bahrain, and then I realized how capable he was of reviving the creative minds of our time. Therefore, it is not enough to be proud of a man and stand at the edge of this boast." "We have to understand ... intellectually and linguistically... what Ibn Khaldun came up with in terms of thought and historical social analysis of a reality that is still surrounding us". Al-Ansari adds that "Ibn Khaldun and his ideas are still trapped within the elite and famous. It has not yet been in the establishment of the desired Arab culture... Ibn Khaldun is more than a memory... He is the future! And he must stay with us for decades to build on his creativity in the upcoming Arab Renaissance project. " (Al-Ansari, 2006)

Others say of Ibn Khaldun: "If the branches of social and human sciences are at odds with Ibn Khaldun's current affiliation, this conflict shows the extent to which the narrow specialization has caused the modern science system; the partial view, which is incompatible with the concept of "unity of knowledge" that Ibn Khaldun lived in and was a result of. If historians say Ibn Khaldun is one of their pioneers, they are correct. If sociologists say that Ibn Khaldun is the founder of sociology, they are also correct. And if others claim this, or something of this, they too are correct, because THE MUQADDIMAH of Ibn Khaldun is an embodiment of the unity of knowledge produced by the Arab Islamic civilization and embodied by thousands of Muslim scholars in various branches of science. If UNESCO is now advocating the so-called "holistic view of education," it is necessary to reflect further on what has resulted from the fractional view of specialization, and specialization of specialization." (startimes, n.d.)

This study will consider Ibn Khaldun's knowledge a culture of its own stimulating creativity, innovation and design through the formation of ambitious concepts and relationships that are based on the interaction and overlap between past data (history and experiences) and the reality of society (culture and al-umran). They should be applicable tools used in activating innovation based on culture as a developmental and economic approach. One may ask: Can we deal with Ibn Khaldun's intellectual issues as a scientific methodology on which creativity, innovation and design tendencies are based? The answer is definitely yes. Ibn Khaldun's thought is comprehensive of knowledge and culture. In a study by Tareq al-Suwaidan⁸⁴ of 20 definitions of culture divided equally between Arab thinkers and the West, they reached a brief definition of culture that combines what culture is? Who is the intellectual? They concluded that culture is "the sum of the knowledge and values controlling behavior" (Tarek Al Suwaidan, 2011) and the intellectual is "the person with a vast repertoire of knowledge and values". (Tarek Al Suwaidan, 2011) Both definitions apply to Ibn Khaldun. His book THE MUQADDIMAH of Ibn Khaldun is a cultural encyclopedia of knowledge and values, and his personality is among the pioneers of history, he was "a thinker, a clerical writer, a jurist, a poet, a politician, a diplomat, a teacher, a historian, a philosopher, a traveler, a judge, Est." (Latif, n.d.)

In this regard, we should not forget to mention that Ibn Khaldun's thought has become part of the ideology and policies of heads of States and decision-makers in one form or another. The most prominent example is the quote of former US president Reagan on Ibn Khaldun's theory of the relationship between State economy and taxation (Al-Gharaibeh, 2015). It is important to clarify that this study will deal with the science of Ibn Khaldun as knowledge assumptions that enrich creativity, innovation and design. From this point of view, the most important ideas of Ibn Khaldun will be discussed to form the first interactive base for creativity, innovation and design based on culture through six pillars: ad-Dīn (religion), at-Tārīkh (history), a-ṣanā'i '(work and craft), al-'ilm (knowledge and science), al-

⁸⁴ **Tareq Mohammed Al-Suwaidan** (طارق محمد السويدان) is a Kuwaiti writer, historian, businessman, and Muslim scholar. He is chairman of "Innovation Group". He is well known in the Middle East and in Muslim communities throughout the world for his management/strategic planning training, and television shows and appearances.

ḥaḍara⁸⁵ (culture and civilization) and al-'umrān⁸⁶ (culture, civilization and urbanization).

4.1.1. ad-Dīn⁸⁷ (The Religion)

In addition to what has been explained about religion and values in Chapter One; Ibn Khaldun considers religion (the religion of Islam)⁸⁸ to be a received knowledge, based on its legitimate source (Allah Almighty)⁸⁹. Ibn Khaldun and all Muslim scholars also consider that the fundamentals of religion have no place for the mind's thoughts except in annexing the branches of their issues to the fundamentals.

Ibn Khaldun mentioned that there are multiple types of received knowledge, all of which must be referenced based on the (Quran)⁹⁰ and the (Sunnah) of the Prophet Muhammad PBUH⁹¹. Among these sciences is the science of interpretation of the Quran and the science of readings of the Quran and the science of Hadith i.e. the words and deeds 'Sunnah' of the Prophet Muhammad PBUH, and the science of monotheism as well as the fundamentals of jurisprudence, linguistics, grammatical science, theology, literature, etc. Then Ibn Khaldun explains that the received knowledge he spoke about is all related to the Islam and Muslims, because in his opinion that each nation has its own aspects of this received knowledge, in relation to other religions. The Muslim (Ibn Khaldun opinion) should follow all that has been said by the Messenger of Allah; Prophet Muhammad PBUH advised that:

⁸⁵ This thesis has its own thought about the Arabic terminology "ḥaḍara" (see 4.1.5)

⁸⁶ This thesis has its own thought about the Arabic terminology "al-'umrān" (see 4.1.6)

⁸⁷ "ad-Dīn" an Arabic terminology for Islam religion

⁸⁸ Islam is both a religion and a complete way of life. Muslims say, 'there is no god but Allah, and Muhammad is the Messenger of Allah.' Muslims believe in a chain of prophets.

⁸⁹ "Allah" is an Islamic Arabic word which means "The Creator and the Only One to be Worshipped is Allah"

⁹⁰ The Qur'an is a record of the exact words revealed by Allah (God) through the Angel Gabriel to the Prophet Muhammad.

⁹¹ Prophet Muhammad PBUH (محمد صلى الله عليه وسلم) came after prophet Jesus PBUH (عيسى عليه السلام) Prophet Muhammad PBUH for Muslims is the last Messenger of Allah (God) to all human beings.

Do not believe the people of the Book, nor disbelieve them, but say, 'We believe in Allah and whatever is revealed to us, and whatever is revealed to you.'⁹² (sunnah.com, n.d.)

Since Ibn Khaldun is a Muslim committed to the Islamic religion and memorizer of the Quran (Wikipedia, n.d.) its impact can be seen in his lifestyle, through the instructions and miracles of the Quran and the Sunnah of the Prophet PBUH. This can either be a direct or indirect effect. The Holy Quran illustrates some of the universal laws, Sunnah, which generate a very deep kind of knowledge in the minds of Muslim scholars. They are many with varied literary theses and they contain so much cognitive creativity. One of its most important goals is to teach us the meaning of life and the origin behind the building of the land and the development of the human thought and sciences. Something that was understood and put in practice by Ibn Khaldun when he put history, civilization, urbanization, etc., are new concepts we may expect, some of which originate from the depth of the texts of the Quran and the Sunnah.

4.1.2. at-Tārīkh⁹³ (The History)

History (at-Tarikh) in Arabic is "the whole set of events experienced by a creature, that is true to the individual and society, as well as to natural and human phenomena." (Almaany.com, n.d.) It is also "a science that examines the past and present of peoples, it recounts the events and analyzes them, and studies the life of individuals and communities". (Almaany.com, n.d.) Here we can see that the science of history for Arabs must be facts and events before it is a philosophy and opinions. Therefore, the history of Ibn Khaldun came to confirm this concept. It is not an account of events from the past, without having any causes within the universal phenomena, in which man, animal, plant and objects are involved. Ibn Khaldun refuses to follow the descriptive method to deal with history without drawing conclusions from real-world laws. He rejects the method of preaching without understanding the principles and the systems

⁹² Narrated Abu Huraira: The people of the Book used to read the Torah in Hebrew and then explain it in Arabic to the Muslims. Allah's Messenger (ﷺ) said (to the Muslims). "Do not believe the people of the Book, nor disbelieve them, but say, 'We believe in Allah and whatever is revealed to us, and whatever is revealed to you.' " (Reference: Sahih al-Bukhari 7362, In-book reference: Book 96, Hadith 89) (sunnah.com, n.d.)

⁹³ "at-Tārīkh" is an Arabic terminology means "history"

of societies. He rejects the totalitarian preconceived philosophical tendencies that govern societies based on personal opinions and interpretations (Abdelbagi, n.d.). Abdel Halim Aweys says that "Ibn Khaldun insisted that the science of history and sociology should move from the stage of description to the stage of analysis. They should move from the apparent to the implied in order to discover the social Sunnah of Allah, by which the facts move in their total construction and civilized framework, to the positive and legitimate interaction with these issues" (Aweys, 2013)

Thus, Ibn Khaldun's history can be metaphorically called "the Art of Umran of (inhabiting) the earth". This art interacts with all aspects of life experiences. It can be sociology and art, science and economics, science and development and architecture, and can be a science of creativity, innovation and design. It is an oasis of laws and a platform to analyze the present and chart future visions, so it is subject to disassembly and analysis and then assembly and synthesis. Karl Marx⁹⁴ (1818-1883) says that the analysis of the past gives us the keys of the present (Ajili, n.d.) while George Santayana⁹⁵ (1863-1952) says "Those who do not remember the past are condemned to repeat it" (AZ Quotes, n.d.) Gottfried Leibniz (1863-1952) says "the present is big with the future, the future might be read in the past, the distant is expressed in the near." (AZ Quotes, n.d.). There are many philosophers and scholars of different religions and cultures who came after Ibn Khaldun, some of them dealt with the knowledge of history in the same spirit created by Ibn Khaldun, and some had different attitudes. They wholly or partly criticize Ibn Khaldun's thoughts. In fact, their criticism has created new cultural implications in Ibn Khaldun's thought processes, and these too deserve to be considered. Ibn Khaldun's famous saying regarding the laws of history:

The past resembles the future more than one (drop of)
water another (Ibn-Khaldun, 1377).

⁹⁴ A Prussian-born philosopher, economist, political theorist, sociologist, journalist, and revolutionary socialist.

⁹⁵ A Spanish philosopher, essayist, poet, and novelist.

Though uttered more than six centuries ago Ibn Khaldun's thought, still occupies many university professors, graduate students, writers and scholars in different fields. In this continuous movement, history has risen from stories about the past, as we have already pointed out, that it is a science that needs explorers and analysts, but it needs creative, innovative people and designers. It should move from being information based, which describes the past in terms of good and evil to the treasures of renewable knowledge that feeds the continuum of development and progress for the present and future. In order to activate history as a catalyst for innovation and design, which is the goal of this study, it is more appropriate to know three standards based on the knowledge of history through societies. The community or society for Ibn Khaldun is one that embodies the knowledge of social reality away from theorizing or philosophy. Ibn Khaldun was able to describe this reality with high objectivity when he wrote about it and its variants of Bedouin and civilians, and countries and means of earning a living, and all the dimensions of political, economic, religious, urban, construction and destruction, and thought based and transferable sciences... These three pillars are:

4.1.2.1. The Customs and Traditions

Customs and traditions, which have coercive traits. Man has no ability or influence to change their pathway. Therefore, Man for Ibn Khaldun is subject to the social **customs and traditions**, as he wrote that "human being is the child of his habits and familiar things, not the child of his nature and humor, the things which he becomes used to are his manners and habits becoming natural to him." But with this level of strength of customs and traditions, Ibn Khaldun puts three points of change and two points of influence.

A. The points of change are:

1. a factor of social time changes is based on concepts and perceptions and it governed by interests, where, the change here is gradual over generations.

2. change is a conflict or competition to impose hegemony on the other or maybe a cooperation that the strong imposes his interests and conditions.
 3. change when there is the belief that the other is better because of his strength and prestige, and so the defeated simulates the defeater, replicating his clothes, vehicle and weapon.
- B. The two points of influence are:
1. civil disconnection, which is in Ibn Khaldun's philosophy, neglecting the documentation of civilization, as well as not continuing to use or benefit from them, which causes them to be gradually lost.
 2. the scientific support countries, i.e. the intellectual heritage, which has a direct or indirect link to the previous element, including the documentation of each science or industry or celebrities like teachers and craftsmen. This makes science refer to civilization and "al-'umrān". Thus, they can be used in development or at least its survival; it is a history that will never return or be priced.

4.1.2.2. The Conformity

It is an investigation of the spoken or transmitted news in the visible or described reality to come up with a story closer to the truth. This means that whoever transmits a story and treats it as full truth, without taking into consideration the rule of conformity, is incorrect. Therefore, we must examine the news and match it with a mental, religious and social scale, and the extent of its either development or rejection.

4.1.2.3. The Proportionality

It is a scientific approach to interpret unknown data in history and human sociology by measuring the unknown by the known news and by reading and reasoning.

There is no doubt that the foundations and laws above if seriously melted into the molds of knowledge, we will have a distinct cultural base in dealing

with history based on deep analysis and synthesis in different concepts away from tradition and repetition. The customs and traditions today, need to be understood, are a philosophy of knowledge containing the causes and causative factors, we mentioned religion and we will mention the additional data. Conformity needs a philosophy to explore similarities throughout history. Proportionality requires a philosophy of variation that leads to a repository of ideas that express the concept of unity and diversity. In this way, history opens up multiple paths to the researcher, enriching culture with information and new knowledge, which will enable him to interact with social attitudes and cultural phenomena through analysis and synthesis, as will be seen in field studies. **However, Ibn Khaldun said he hoped that generations after him would come to study his ideas by supporting, criticizing or adding. But it must be within the reality of societies, and not only within its conceptualizations and philosophy.**

4.1.3. *aṣ-ṣanā'i'*⁹⁶ (Crafts) (Professions) (Jobs)

Ibn al-Khaldun's *aṣ-ṣanā'i'* (Crafts) are all the work of the individual in order to earn a living, whether it is carried out manually or intellectually. Ibn Khaldun considers *aṣ-ṣanā'i'* to be all jobs or professions. He views the crafts as having a functional aspect in terms of their importance in the cultural progress of societies and a dynamic view in terms of the mutually influential relationship with society. (El-daks, 2001) There are some who put three concepts of Ibn Khaldun's crafts: First, a general concept is linked to the production of human mental activity. Second, a concept based on human physical activity. Third, a concept that is closely related to certain rules and laws, must be known and received by an instructor. (alukah.net, 2009)

Ibn Khaldun describes craft as the talent of "habit", which requires action and thought. In this regard, Ibn Khaldun's opinion can be divided into three important subjects:

4.1.3.1. The talent is sharpened by practice, he says:

A craft is the habit of something concerned with action and thought.

In as much as it is concerned with action, it is something corporeal

⁹⁶ "*aṣ-ṣanā'i'*" is an authentic Arabic terminology which means, crafts, professions, jobs, etc.

and perceptible by the senses. Things that are corporeal and perceptible by the senses are transmitted through direct practice more comprehensively and more perfectly (than otherwise), because direct practice is more useful with regard to them. A habit is a firmly rooted quality acquired by doing a certain action and repeating it time after time, until the form of (that action) is firmly fixed. (Ibn-Khaldun, 1377)

4.1.3.2. The quality of craft by observation, he says:

A habit corresponds to the original (action after which it was formed). The transmission of things one has observed with one's own eyes is something more comprehensive and complete than the transmission of information and things one has learned about. A habit that is the result of (personal observation) is more perfect and more firmly rooted than a habit that is the result of information. The skill a student acquires in a craft, and the habit he attains, correspond to the quality of instruction and the habit of the teacher. (Ibn-Khaldun, 1377)

4.1.3.3. Innovation in the craftsmanship by mastering the easy and then the difficult, he says:

Furthermore, some crafts are simple, and others are composite. The simple ones concern the necessities. The composite ones belong to the luxuries. The simple crafts are the ones to be taught first, firstly because they are simple, and (then) because they concern the necessities and there is a large demand for having them transmitted. Therefore, they take precedence in instruction. (But) the instruction in them, as a consequence, is something inferior. The mind, (however,) does not cease transforming all kinds of (crafts), including the composite ones, from potentiality into actuality through the gradual discovery of one thing after the other, until they are perfect. This is not achieved all in one stroke. It is achieved in the course of time and of generations. Things are not transformed from potentiality into actuality all in one stroke, especially not technical matters. Consequently, a certain amount of

time is unavoidable. Therefore, the crafts are found to be inferior in small cities, and only the simple (crafts) are found there. When sedentary civilization in (those cities) increases, and luxury conditions there cause the use of the crafts, they are transformed from potentiality into actuality (Ibn-Khaldun, 1377)

It can be inferred from Ibn Khaldun's philosophy that business and crafts in societies develop according to the nature of their development policies. This can be summed up in three policies:

A. An advanced development policy

Based on the business and the industries with the complex and interrelated knowledge and technical content, which gives motivation to generate ideas and innovations in the field of business and crafts within a methodology that considers the complementarity between them. It also considers the creation of a cooperative and interactive society capable of absorbing all new things and specializing in them. We can thus infer this from the theory of Ibn Khaldun in the jurisdiction of some areas with some crafts, he says:

The activities of the inhabitants of a city necessitate each other, since mutual co-operation is innate in civilization. The necessary activities are restricted to certain inhabitants of the city. They are in charge of them and become experts in the craft(s) belonging to them. These activities become their particular job. They make their living through them and derive their sustenance from them, because (these activities of theirs) are matters of general concern in the city and generally needed. (Ibn-Khaldun, 1377)

B. An ordinary development policy

Based on works and crafts with simple and traditional knowledge and technical content, whose purpose is more related to economic aspects than creating an innovative society capable of specializing in advanced works and crafts as in the previous case. This can also be seen from Ibn Khaldun's theory In the jurisdiction of some areas, he says:

activities not required in a city are not regarded, since there is no profit in them for those who occupy themselves with them. The activities required for the necessities of life, such as those of tailors, smiths, carpenters, and similar occupations, exist in every city. But activities required for luxury customs and conditions exist only in cities of a highly developed culture, that have taken to luxury customs and sedentary culture (Ibn-Khaldun, 1377)

C. A stimulating development policy

Based on activating the culture of society towards innovative and creative works and crafts, including simple and complex ones, he says:

In accordance with increase in the customs of sedentary culture and the requirements of luxury conditions, there originate crafts (especially) for this kind (of luxury requirements). (The crafts of this) kind will, thus, exist in a particular city, but not in others. (Public) baths fall into this category. They exist only in densely settled cities of a highly developed civilization as a kind of indulgence resulting from luxury and wealth. Therefore, public baths do not exist in medium-sized towns. It is true that some rulers and chiefs desire (to have baths in their medium-sized cities). They construct them and put them into operation. However, since there is no demand for them from the mass of the people, they are soon neglected and fall into ruins. Those in charge of them speedily leave them, because they have little profit and income from them (Ibn-Khaldun, 1377)

aş-şanā'i' (Crafts) for Ibn Khaldun are constantly evolving, according to the "al-hadara" policies and values of each society. These policies and values can be judged by observing the "al-'umrān" tendencies of the same society. In other words, aş-şanā'i' of Ibn Khaldun can be directly linked to "al-'umrān". If so, al-'umrān increases the number of aş-şanā'i', vice versa. Through this link, we can also evaluate the prevailing "al-hadara" associated with this "al-'umrān"

because it is the bridge between the content and the apparent between the values of the society and their *aş-şanā'i'* on the one hand and the integration of "al-'umrān" and its consistency and quality on the other hand. *aş-şanā'i'* for Ibn Khaldun's is difficult to stop its creativity, innovation and growth if it is usually within the culture of the people where he says that "if *aş-şanā'i'* established by "al-hadara" it is therefore difficult to erase."

One of the new intellectual orientations to which Ibn Khaldun referred in relation to *aş-şanā'i'* is that it is divided into two types: a kind of "essential", which has a direct or indirect relationship to the daily life of the people and cannot be dispensed with and must be developed and maintained. And another type of "Sharif", which are those that have importance and priority especially to the rulers and kings more than everyone else, for example: writing, papering, singing, medicating, etc. However, those are Ibn Khaldun's ideas about the "Sharif" of *aş-şanā'i'* may not directly apply to the realities of the lives of societies and their governments today. But in a philosophical perspective, this may be found indirectly within the framework of government systems today. The people of democratic states, for example, elect their own governments from candidates who care about everything that is "Sharif" advocated by the people. On the contrary, it is true that in the case of one-party governments, monarchs or dictators see that the "Sharif" of *aş-şanā'i'* and policies are that they advocate without the intervention of the people.

Where Ibn al-Khaldun believes that all of these *aş-şanā'i'* are materially or morally related to each other, directly or indirectly, and this linkage is what gives "al-'umrān" its value and quality, on the one hand, and the strength and vitality of the labor market, on the other. E.g. agriculture, construction, carpentry and many others are considered a necessity for "al-'umrān". Calligraphy is also considered as one of these necessities because it is an important industry that is at the heart of civilization and is today equivalent to the visual communication, printing and advertising design.

Ibn Khaldun pointed out that *aş-şanā'i'* (crafts) embody some development and urban secrets that must be thought of. He says, "Must understanding the secrets of *aş-şanā'i'* in the creation... however, the existence of *aş-şanā'i'*

without thinking is impossible; it is fruit and subordinate to it" as if to indicate that without understanding the secrets of the crafts in urbanization and stimulating thought towards its sustainability is of no use. Moreover, Ibn Khaldun believes in the crafts types, for example, engineering from the crafts that has important ranking because it links sciences with each other. Therefore, it requires imagination, interaction, and talent:

It should be known that geometry enlightens the intellect and sets one's mind right. All its proofs are very clear and orderly. It is hardly possible for errors to enter into geometrical reasoning, because it is well arranged and orderly. Thus, the mind that constantly applies itself to geometry is not likely to fall into error. In this convenient way, the person who knows geometry acquires intelligence. It has been assumed that the following statement was written upon Plato's door: "No one who is not a geometrician may enter our house." Our teachers used to say that one's application to geometry does to the mind what soap does to a garment. It washes off stains and cleanses it of grease and dirt. The reason for this is that geometry is well arranged and orderly, as we have mentioned.
(Ibn-Khaldun, 1377)

Ibn Khaldun's opinion that, singing is one of the tenets that comes within the late concerns of al-'umrān, because it is considered perfectionism, no use but to fill the free time, joy and fun. It is thus less important than engineering. Ibn Khaldun also considers the teaching of science and industry from aş-şanā'i' that has different terminology and connotations. However, each scholar has his own philosophy towards education depends on the way of performing the existence of what is intended to teach. Ibn Khaldun's aş-şanā'i' all earn their owners intelligence and new mind to practice other industries, and to realize new knowledge. Ibn Khaldun points out that, the academics or teachers which mastering different professionals' knowledge, do not mean that they are able to do a real practice for what they are mastering from skill and quality knowledge! However, Ibn Khaldun highlighted that, such situation is not a defect but a perfection of quality and its sustainability of academic thought. Ibn Khaldun also

points out that the different crafts and abilities are not crowded in one mind, accordingly, those who have a skill in a particular industry are rarely skilled in another industry or achieve their goal with it. To entrench the importance of this matter in this study, we recall what Ibn Khaldun wrote:

A tailor, for instance, who has acquired the habit of tailoring and knows it well and has that habit firmly rooted in his soul, will not afterwards master the habit of carpentry or construction, unless the first habit was not yet firmly established and its coloring not yet firmly rooted. The reason for this is that habits are qualities and colors of the soul. They do not come all at once. A person who is still in his natural state has (an) easier (time)acquiring certain habits and is better prepared to gain them. When the soul has been colored by a habit, it is no longer in its natural state, and it is less prepared (to master another habit), because it has taken on a certain coloring from that habit. As a result, it is less disposed to accept (another) habit. This is clear and attested by (the facts of) existence. One rarely finds a craftsman who, knowing his craft well, afterwards acquires good knowledge of another craft and masters both equally well. This extends even to scholars whose habit has to do with thinking. (The scholar) who has acquired the habit of one particular science and masters it completely-will rarely achieve the same mastery of the habit of another science, and if he were to study (another science), he would, except under very rare circumstances, be deficient in it. The reason lies in the significance attaching, as we have mentioned, to preparedness and the fact that he becomes colored by the color that the soul receives from the habit it acquires. (Ibn-Khaldun, 1377)

For the importance of crafts in the execution of tacit knowledge (practical) and without relying on the acquisition for explicit knowledge (scientific), Ibn Khaldun holds a beautiful comparison between man and animal through the philosophy of crafts. He points out that Allah (God) gave the animal the abilities that preserve

its life and defends itself. On the contrary, man was given thought and hand. The hand is ready for the works of thought, and through crafts, he is equipped with the machines and the needs that can guarantee him all the abilities than the rest of the animals. This is to preserve the continuation of life, and dedicate it to the continuation of happiness, and defend it for himself and his environment, thus becoming an active participant in the reconstruction of the land and the artifacts become the fruits of thought “the crafts cannot possibly exist without the ability to think, because they are the fruit of thinking and depend on it.” (Ibn-Khaldun, 1377) One of Ibn Khaldun’s thoughts on the conditions of perfection and sustainability is to follow the words of the wise based on imagination while continuously linking work and thought: "The beginning of action is the end of thinking, and the end of thinking is the beginning of action" (Ibn-Khaldun, 1377)

4.1.4. al-'ilm⁹⁷ (knowledge) (sciences)

Ibn Khaldun clarifies that, Science is abundant, and knowledge is abundant, and both are need for the divine knowledge, but divine does not lack to both. This proves that religion is an important source of science and knowledge. Ibn Khaldun also proves that there is a scientific and knowledge link between sky and earth, and the man is the link between both of them; between the material world on earth and the spiritual world that needs strength in perception, apperception, reason and thought. From this point of view, Ibn Khaldun established his cognitive theory, which is based on six basic principles: causation, the human soul, mysticism, vision and dream, magic, and finally divination. Knowing that the sources of knowledge for the fifth and sixth pillars (magic and divination) and activating science and education around them is something that is forbidden in Islam and all the causes that come from them must be terminated. The reason for being educating about them is to extract the toxin from the poison when it is necessary to address the damage of such anomalous sciences and not to take it as a craft or workmanship. In the

⁹⁷ "al-'ilm" is an Arabic Quranic word, it has a deep interpretation meaning around science, knowledge and thinking. Islam is the religion of science, knowledge and thinking: The first aayah of the Qur'an to be revealed enjoined reading which is the key to knowledge. Allah says (interpretation of the meaning) : "Read! In the Name of your Lord Who has created (all that exists). He has created man from a clot (a piece of thick coagulated blood). Read! And your Lord is the Most Generous. Who has taught (the writing) by the pen. He has taught man that which he knew not" [al-'Alaq 96:1-5].

following subjects, we will discuss some of Ibn Khaldun's concepts of "al-'ilm" for their importance to study:

4.1.4.1. The causality:

The causality according to Ibn Khaldun is not a metaphysical, in the philosophical sense, which was used by scientists before and after it. But it is within the scope of the world of observation and experience, which lived, watched and practiced. What Ibn Khaldun wrote is a repetition of the social act of the societies of the period in which he lived. The reason is to return the thing to the reason for its creation, because the act is only due or cause disputing by previous perceptions that follow each other, until they end up with the cause of the causes and how they were found or created. Ibn Khaldun is a Muslim, he believes that, cause of the causes is due to Allah Almighty, or what is called the science of monotheism. Thus, Ibn Khaldun begins his cognitive theory of the universe of universes, which is the tangible physical world of the elements seen from Earth to water and then to the space and then to the fire, etc. which are connected to each other until this tangible world ends with our huge science of astronomy. Then comes the world of creation from creatures living, represented by plants, animals and non-living creatures represented in the inanimate minerals and other resources. Thus, make man, the link between the material world and the spiritual world.

The importance of Ibn Khaldun's causal theory evokes rational logic linked to the power and legislation of the Creator and the purpose of the existence of creatures on earth. That is, there is an ethic that is not only explained by pure philosophy and should not left it to be allowed without to be returned to the ethics ruled by the world of monotheism. For example, the profession of the wine industry is caused by the desire of people to drink it, for multiple reasons. Some of them see it as a delicious drink and some see it helps to restrain the mind and some see it otherwise. But the wine industry; when it returns to the world of monotheism, we find that the literature in this science prohibits its industry with certain texts of the Quran and the Sunnah. This is because it goes to the mind and has disadvantages more than the benefits, so we find that Islam prevented the start of the reasons for creating this act,

namely the wine industry, but it prohibited all the roads leading to wine. This example confirms the inadmissibility of the forbidden act in the Islamic religion, which is the reason for the rationale for finding it.

4.1.4.2. The human soul:

The human soul according to Ibn Khaldun is incomplete without its union with the body, so it is a spiritual force as the soul, and an actual force when completed in the body. The powerful spirituality of the soul comes from the vast knowledge of man's sensory reality from hearing, sight, tasting, smell and touch. This sensory reality rises to the intellect, which in turn creates ideas on the one hand and activates the imagination on the other. And thought and imagination levels vary, with the varying absorptive capacity of the human soul, this capacity is divided into three levels by Ibn Khaldun which we will address them later.

4.1.4.3. The human thinking

According to Ibn Khaldun "al-'ilm" is based on two categories: a natural category that is guided by a person's thought, and a transport category that person takes from the thought of others. These two types of "al-'ilm" consist of perception and apperception knowledge among all human beings. Therefore, the resulting is learning and teaching, which both are also settled only by thought. The thought of Ibn Khaldun, in addition to what we have mentioned above, occupies a high rank because it is the basis of human civilization on earth and Allah has distinguished human beings with it. Through "al-'ilm", "aṣ-ṣanā'i" arise and "al-'umrān" occurs, as we will review it later. The researcher believes that ibn Khaldun's philosophy of "al-'ilm" can be placed in the following order:

A. Thought philosophy

Thought is the love of knowledge and exploring the depths and the realization of its arts by contemplation and observation and exploring new ones by analysis and synthesis. The power of human thought can be understood by Ibn Khaldun through three levels:

1. First level: the man's intellectual

the understanding of the things that exist in the outside world in a natural or arbitrary order, so that he may try to arrange them with the help of his own power. This kind of thinking mostly consists of perceptions (tasawwur). It is the discerning intellect with the help of which man obtains the things that are useful for him and his livelihood and repels the things that are harmful to him. (Ibn-Khaldun, 1377)

2. Second level: the experimental intellect

the ability to think which provides man with the ideas and the behavior needed in dealing with his fellow men and in leading them. It mostly conveys apperceptions (tasdiq), which are obtained one by one through experience, until they have become really useful. (Ibn-Khaldun, 1377)

3. third level: the speculative intellect

the ability to think which provides the knowledge, or hypothetical knowledge, of an object beyond sense-perception without any practical activity (going with it). It consists of both perceptions and apperceptions (tasawwur and tasdiq). They are arranged according to a special order, following special conditions, and thus provide some other knowledge of the same kind, that is, either perceptive or apperceptive. Then, they are again combined with something else, and again provide some other knowledge. The end of the process is to be provided with the perception of existence as it is, with its various genera, differences, reasons, and causes. By thinking about these things, (man) achieves perfection in his reality and becomes pure intellect and perceptive soul. This is the meaning of human reality. (Ibn-Khaldun, 1377)

B. Science philosophy

Science is the use of the thought that we previously discussed in the adaptation of knowledge on a particular subject to be the art of the new arts. This art is done through stages summarized in the following steps: (1) the desire of the intellect to collect what he does not have knowledge and perceptions of. (2) The orientation towards the sources of knowledge and awareness of the sciences of legitimacy and philosophy. (3) Graduation in the development of facts and information. (4) Stimulate self-development and exploration capabilities. (5) Continue until the formation of a coherent outcome of knowledge and perceptions is achieved. (6) Use of the knowledge in practice on variety of issues.

C. Education philosophy

Education is the use of thought also in the transfer of science (knowledge), of the art of science gradually by the following steps: (1) gives the learner items of the assets of art that he or she wants to learn, explain the general and not detailed matters of art. Determination of the questions based on the strength of the mind of the learner and acceptability of art, the learner continues to learn until the completion of all art, after this stage the learner has gained partial knowledge to enable him to understand the art. (2) The learner is given the same art but at this stage, knowledge is imparted in more detail, not complete detail, but with more statements and depth of knowledge through the use of experiments and questions. The learner is finished from this stage and has become a deep thinker and a rich habit on the topics of art that he learned. (3) The learner repeats the same previous art for the third time and at this stage does not leave (the learner and the teacher) something related to art only and be clarified and discussed no matter how difficult and overlapping the issues, to get rid of the learner after this stage and science has acquired his thought and became an entity of the habit has.

D. Mastering science philosophy

Mastering science is the "talent of reason and the power of acumen", it is also the "talent of the transition from evidence to the implications"

which mentally reached the actor giving him an understanding of the unknown and mysterious things and the formation of knowledge based around it. In other words, mastering the science is a transition from one evidence to another provided that the person continues writing, researching, exploration and working on self-esteem. Where Ibn Khaldun says that "the smartness in science and mastery of it, is based on the level of talent that able to obtain the science principles and rules, and to stand on its issues, and devise branches of its origins."

The talent at Ibn Khaldun is different from understanding and awareness. Understanding and awareness can be shared by people in a science and issues. But talent is characterizing the scholars or a man in-depth thought different from others. The talent at Ibn Khaldun may also be a practical skill, such as industry, crafts, physical and athletic abilities. Or maybe a mental skill such as calculation and imagination. Ibn Khaldun also believes that the best way to develop the talent is to actually practice it, thus giving an example to a student who spends many years in science, in which he takes more care in memorizing, rather than taking care of question, understanding and practice. This student will undoubtedly be his talent limited in practice if he negotiates, debates or teaches.

4.1.5. al-ḥaḍāra⁹⁸ (The Sedentary Culture)⁹⁹

Ibn Khaldun used the term "al-ḥaḍāra" which, according to the Arabic dictionary, means "urban residence" also known as "urbanization, which is the opposite of nomadism". (almaany.com, n.d.) meaning the movement of the individual or society from a certain situation to another. Malik bin-Nabi is defined "al-ḥaḍāra" as "providing the total moral and material conditions that allow a particular society... in every stage of its existence... the necessary assistance."

⁹⁸ "al-ḥaḍāra" is a very specific Quranic Arabic word, which does not exactly mean civilization or culture. I prefer to use it without translation.

⁹⁹ Franz Rosenthal used "Sedentary culture" as the English meaning for "al-ḥaḍāra" the term 'culture' is used numerous times with reference to other species as well as the human species. The use of such terms as horticulture, silviculture, permaculture, the bee culture, the ant culture, and the bacterial culture suggests that human beings believe that what they deem to be culture is not limited to themselves, but is omnipresent throughout the entire domain of nature. This explains why the term is used frequently in disciplines like ecology, biology, botany and zoology.

(Reda, n.d.) Tariq al-Suwaidan defines "al-ḥaḍara" as "the intellectual approach of the nation formed in material and moral production." (Bashraheel, 2009, p. 30) Hussein al-Munais defined "al-ḥaḍara" as "the achievement of every effort made by man to improve the conditions of his life, whether the effort is achieved intentionally or unintentionally, materialistically or morally". (Moanis, 1998, p. 13) He also points out that "al-ḥaḍara" "is measured" in terms of security, trust, adequacy, understanding, cooperation, and love". (Moanis, 1998, p. 49) The corresponding translation of "al-ḥaḍara" in English is "civilization" which, according to the Oxford Dictionary, is defined as: "the stage of human social development and organization which is considered most advanced", "the society, culture, and way of life of a particular area" and "the comfort and convenience of modern life". Merriam-Webster defined "civilization" as: "a relatively high level of cultural and technological development", "the culture characteristic of a particular time or place", "the process of becoming civilized", "refinement of thought, manners, or taste" and "a situation of urban comfort"

Importantly, the thing to keep in mind is that the word "al-ḥaḍara" used by Ibn Khaldun was not translated in the English version of Ibn Khaldun's "The Introduction" in the usual sense of "civilization". Instead, the translator used the term "sedentary culture". However, the word "culture", translated in Arabic, is "al-thaqafa" as has been explained previously, but Ibn Khaldun did not use this Arabic word intensively within his writings. The interpreter may have used what fits the meaning rather than the literal translation of the word, which gives us many possibilities and a philosophy that is not part of the scope of this study.

4.1.5.1. Ibn Khaldun's philosophy of "al-ḥaḍara"

Ibn Khaldun's philosophy of "al-ḥaḍara", and al-'umrān", cannot be construed as definitive definitions or literal translations that correspond to non-Arabic terms. The researcher believes that the scientific arena in the field of Arabic language still suffers from a severe shortage of specialized art, architecture and design studies, especially regarding with what Ibn Khaldun means in his philosophy about "al-ḥaḍara" and "al-'umrān" because they have a great relationship with art and design, as well as architecture and urban planning, in addition to their relationship with human sociology.

The researcher's opinion that, today's philosophy of the word "culture" is found in Ibn Khaldun's work but cannot be placed within an independent definition of the word of "al-thaqafa" which is culture in English. Ibn Khaldun's culture is a dynamic concept with an interrelated and interactive approach that is a combination between: the development of place (the urbanization), the experience of time (the history) and the human thoughts and actions (religion, knowledge and crafts). In some views the word culture in Ibn Khaldun is "al-'umrān" as explained by Abdullah Al-Owaisi in his book about "Malik bin Nabi life and thought", where he said, Ibn Khaldun's term "al-'umrān" is equivalent to the term "al-thaqafa" or "culture" in the contemporary usage, while Ibn Khaldun's "al-ḥaḍara" is the optimum of "al-'umrān" or "urbanization", based on that "al-thaqafa" or "culture" is at the optimum of its development" (Owaisi, 2012, pp. 309, 381)

This is what places Ibn Khaldun's thought in continuous scientific debate, and the peak of creativity in exploration and observation. To understand Ibn Khaldun's "al-ḥaḍara", the researcher believes that it is better to understand it as a means of quality and action development, rather than a and not as a definition or restricted within meanings of other languages such as "civilization" or "urbanization" or "culture" or even "sedentary culture."

In order to understand this issue, we have to unpack Ibn Khaldun's famous saying, which describes the beginning of the transition to "al-ḥaḍara". He said that "the roughness of the Bedouin comes before the smoothness of "al-ḥaḍara"." The researcher sees that this sentence contains four creative cultural aspects: 1) "al-ḥaḍara" is a process that evolves socially from one state to another: from a close simple social situation to a more open social situation, from a community based on the tribe, to a community based on civil society. However, this is what Ibn Khaldun represented with a word of (before). 2) "al-ḥaḍara" is a process of intellectual ascension from one case to another: from the state of individual and binding opinion, to the state of pluralistic and collective opinion, from the state of neoclassical thought based on factionalism, to the thought of democracy based on the Shura¹⁰⁰,

¹⁰⁰ Shura is an Arabic word for "consultation". The Quran and the Prophet Muhammad encourage Muslims to decide their affairs in consultation with those who will be affected by that decision.

as expressed by Ibn Khaldun. However, this is what Ibn Khaldun represented by (roughness and smoothness). 3) "al-ḥaḍāra" is a sustainable process towards development and progress, in the sense that the development of society must be accompanied by a rise in thought, knowledge, and crafts, which made Ibn Khaldun's interaction between (Bedouin and "al-ḥaḍāra"). 4) The syntax of the sentence in Arabic suggests that "al-ḥaḍāra" is not only apparent, it is an implicit matter of sustainability in the development of societies' performance and the promotion of their ideas with sustainability, while taking into consideration place and time, otherwise it will be a dazzling shape and not of constructive content.

Ibn Khaldun is a creative in the use of vocabulary in his statement, which proves his full knowledge of the status of the societies of the region to which he belonged. However, he did not refer to societies that he did not know in his analogy. On the other hand, we should know that Ibn Khaldun in his statement does not diminish the importance of the Bedouin society by the term "roughness" nor does he favor the urban society by the term "smoothness", what he wanted to explain intelligently are the values and moral communication between both societies.

Whoever reads Ibn Khaldun's thought in the foreground from an innovative and creative perspective realizes that the "al-ḥaḍāra" that he means will be static if they limit it to specific definitions! "al-ḥaḍāra" that Ibn Khaldun means is a dynamic culture, which produces multiple concepts, such as: the skill of crafts which is expressed by the (persistence of "al-ḥaḍāra"), the identity of urban, which is expressed by the (entrenchment of "al-ḥaḍāra"), the aesthetics of appearance, which is expressed by the (objective of "al-ḥaḍāra"), the different kind of products, which is expressed by the (customs of "al-ḥaḍāra"), the quest for creativity, innovation and design, which is expressed by the (sects of "al-ḥaḍāra"). The luxury and extravagance, the acquisition of man's needs or the need to go and enjoy the things that are forbidden by Sharia, which is expressed by the (excessive of "al-ḥaḍāra") and The wisdom, experience and the advancement of thinking, which is expressed by the (perfect of "al-ḥaḍāra")

Therefore, it is not wise to limit Ibn Khaldun's thought about "al-ḥaḍara" within specific definitions. In fact, the researcher suggested that, Ibn Khaldun treated "al-ḥaḍara" within three concepts, these concepts will be shown in the next topic.

4.1.5.2. Ibn Khaldun's concepts of "al-ḥaḍara" as per the researcher's suggestion

A. "al-ḥaḍara" as an essential development platform:

It is a positive culture that Ibn Khaldun appreciated, since it is essential for the mechanisms of development and cannot be separated from it. This kind of culture we can investigate through his thoughts about "al-ḥaḍara" in his book, "The Introduction":

sedentary culture "al-ḥaḍara" is a condition that is the result of custom and goes beyond the necessary conditions of civilization (Al-Umran). How far beyond, differs in accordance with unlimited differences in the prosperity and the numerical strength or weakness of the nations. (Sedentary culture) occurs in the (nations) when much diversity develops among its various subdivisions. It is thus on the same level as the crafts (aṣ-ṣanā'i'). Each particular kind of craft needs persons to be in charge of it and skilled in it. The more numerous the various subdivisions of a craft are, the larger the number of the people who (have to) practice that craft. The particular group (practicing that craft) is colored by it. As the days follow one upon the other, and one professional coloring comes after the other, the craftsmen become experienced in their various crafts and skilled in the knowledge of them. Long periods of time (experiences) add to establishing the crafts and to causing them to be firmly rooted. This happens mostly in cities, because cities have a highly developed civilization and their inhabitants are very prosperous, and the dynasty is at the root of it, because the dynasty collects the property of the subjects and spends it on its inner circle and on the men connected with it who are more influential by reason of their

position than by reason of their property. The money comes from the subjects and is spent among the people of the dynasty and then among those inhabitants of the city who are connected with them. They are the largest part (of the population). Their wealth, therefore, increases and their riches grow. The customs and ways of luxury multiply, and all the various kinds of crafts are firmly established among them. This (then) is sedentary culture. (Ibn Khaldun, 1377)

In the concept of design and innovation, Ibn Khaldun wanted to say that "al-ḥaḍāra" is an additional physical requirement (i.e., its primary images exist within the ordinary society of the village or the city), whose quality and value vary according to the different social and economic aspects of the trade. Over time, these requirements increase, and they become increasingly like "trades", which is necessary for the presence of specialists, designers and innovators. With the repetition and diversity and the accompanying succession of generations, the society of "al-'umrān" becomes a professional one for these industries and is able to learn the details of its science and knowledge. All this would not have been for the State's sponsorship of this cycle of "al-ḥaḍāra" and the ability of the economy to make it sustainable. The society will become rich and have a large income. This will increase demand for the requirements of "al-ḥaḍāra", which will make the society a thinker with experience in manufacturing and production in all its forms and arts.

Ibn Khaldun says that "al-ḥaḍāra" varies with al-'umrān. When al-'umrān was more "al-ḥaḍāra" was more complete, so he sees that it depends on the state, the more al-'umrān there is, the more "al-ḥaḍāra" there is. Urbanism is based on civilization. Ibn Khaldun praises the urban dwellers for their positive impact on the conditions of the pension, housing, construction, matters of religion and the world and all their work, customs, transactions and all their actions. The reason for the positive urban impact on urbanization in Ibn Khaldun's view is due to the craftsmanship that they employ in their society and which their members receive generation after generation. He believes that every industry is

practiced on the soul with a new mind that helps to accept another new industry and prepares minds for knowledge. This is what we referred to in the concept of "basic civilization" based on a large quantity of diverse trades in the management of the home, community, work ethic and religion. The basic civilization of Ibn Khaldun is if it is a law that urges industry and regulates science, and from it comes the reconstruction of the mind and the acquisition of it by the hardness of the industry. "The firmness of the industry - its quality, perfection and demand - is, in fact, rooted in civilization and its longevity."

Ibn Khaldun believes that the societies of ancient civilization, when they decline for various reasons, before the emergence of newly created societies and their civilization, the older and declining civilization and its related sciences and knowledge do not retreat and remain in place, even with all the possibilities. The reason for this is that civilization, when it is solid, sustainable and long overdue, is difficult to vanish. Here we can form an equation based on Ibn Khaldun's thought that the vitality and quality of civilization generates a complete civilization and full civilization cannot be destroyed by undermining its Umrān. Ibn Khaldun gives an eloquent example of this. He says that "Baghdad, Córdoba, Kairouan, Basra, and Kufa are the most important places where Islam was born and where civilization was replete with the seas of science and mastered the terms of education, science classes, and they missed the late ones, as a result of the decline of Amranha and dispersion of its population, and lost science and education and migrated to other places. Therefore, he says of Egypt, where civilization was then transferred, "No more civilization today than Egypt, it is the mother of the world, the lwan of Islam and the fountain of science and industry." We are not far from the crusades and colonialism, cannot undermine the civilization itself, it remains and can return at any moment if the return of the praises of the architecture that suits them, and cannot be without the understanding of the state, so Ibn Khaldun says that "Civilization is one of the outcomes of state and is consolidated through the sustainability of the state and its prosperity"

B. "al-ḥaḍara" as a complementary development platform:

It is a positive culture that Ibn Khaldun appreciated, regardless of whether or not it is on the same priority scale of the previous essential culture. This culture supplements the development of urbanization by some needs for a few people. This kind of culture we can realize it through Ibn Khaldun's thought about "al-ḥaḍara" in his "The Introduction" book:

Sedentary culture is merely a diversification of luxury and a refined knowledge of the crafts employed for the diverse aspects and ways of (luxury). This for instance concerns, food, clothing, building, bedding (carpets), utensils, and other household needs. Each one of these things requires special interdependent crafts serving to refine and improve it. (These crafts) increase in number with the (growing) variety of pleasures and amusements and ways and means to enjoy the life of luxury the soul desires, and (with the growing number of) different things to which people get used. (7) For the elegant execution of all these things, there exist many crafts, which are not needed in village life with its lack of elegance. When elegance in (domestic) economy has reached the limit, it is followed by subservience to desires. From all these customs, the human soul receives a multiple coloring that undermines its religion and the worldly (well-being). (It cannot preserve) its religion, because it has now been firmly colored by customs (of luxury), and it is difficult to discard such coloring. (It cannot preserve) its worldly (well-being), because the customs (of luxury) demand a great many things and (entail) many requirements for which (a man's) income is not sufficient. This is explained by the fact that the expenditures of the inhabitants of a city mount with the diversification of sedentary culture. (Ibn-Khaldun, 1377)

Ibn Khaldun believes that there is a direct relationship between luxury and crafts. The more cultural luxury, the greater the need for the

demands of perfection, which requires the generation of additional products, which is a difference between civilizations even if the level of luxury is similar. The luxury for Ibn Khaldun is from the wealth and grace; wealth and grace from the dependencies of kingship and the amount of what the people of the state take over. Ibn Khaldun confirms that by saying, "Consider it, understand it, and think it's true," he said.

C. "al-ḥaḍara" as a negative development platform:

Ibn Khaldun believes that the negative civilization comes When the state begins to deteriorate, it approaches evil and gradually distances it from good. One of the signs of Ibn Khaldun is the imposition of unfair taxes and increasing expenses on extravagance and ostentation, and failing to differentiate between the fundamentals and luxuries, which causes wasteful and unintentional living. It is also an excess of discretion in respect of furniture, eating, drinking, etc. As for the peak of the evils, they are preoccupied with the desires of vulva which are forbidden for all kinds of adultery and sodomy.

Among the things that corrupt sedentary culture, there is the disposition toward pleasures and indulgence in them, because of the great luxury (that prevails). It leads to diversification of the desires of the belly for pleasurable food and drink. This is followed by diversification of the pleasures of sex through various ways of sexual intercourse, such as adultery and homosexuality. This leads to destruction of the (human) species. It may come about indirectly, through the confusion concerning one's descent caused by adultery. Nobody knows his own son, since he is illegitimate and since the sperm (of different men) was mixed up in the womb. The natural compassion a man feels for his children and his feeling of responsibility for them is lost. Thus, they perish, and this leads to the end of the (human) species. Or, the destruction of the (human) species may come about directly, as is the case with homosexuality, which leads directly to the non-existence of offspring. It contributes more to the destruction of

the (human) species (than adultery), since it leads to (the result) that no human beings are brought into existence, while adultery only leads to the (social) non-existence of those who are in existence. (Ibn-Khaldun, 1377)

4.1.6. *al-'umrān*¹⁰¹ (Civilization) (Urbanization)

Ibn Khaldun used the term "al-'umrān" in the Arabic language "building, developing, constructing", which is "Earth development and revival it", which is "what the country is living and improving its condition through agriculture, industry, trade, and the success of business and urbanization." There are those who consider "al-'umrān" as a sociology, or as culture, or even as a science of organizing human settlement through planning, design, and innovation. al-'umrān in Islam is based on justice. (Almaany.com, n.d.) We may deduce the concept of "al-'umrān" from the Holy Quran in multiple verses, all of which build the relationship of man to Allah through the development and revival the earth and not seek to destroy it¹⁰².

"al-'umrān" in the Muslim faith is a system of life, so one is required to keep it even if one is on the bed of death¹⁰³. The term "al-'umrān" today is often synonymous with "urbanization" rather than "civilization" that has been used in the English translation of Franz Rosenthal's "Muqaddimah of Ibn Khaldun". The same applies for the term "al-ḥaḍara" today is often synonymous with (civilization) rather than (sedentary culture) as used by the same translator. However, the translator, most often, followed the cultural translation theory¹⁰⁴ to convey Ibn Khaldun's philosophy within a context that corresponds to the conditions of the various social issues he discussed, not a literal translation that conveys Arabic text into English only.

¹⁰¹ "al-'imrān" is a very specific Quranic Arabic word, which does not exactly mean civilization, urbanization or culture. I prefer to use it without translation.

¹⁰² It is Allah who made for you the earth a place of settlement and the sky a ceiling and formed you and perfected your forms and provided you with good things. That is Allah, your Lord; then blessed is Allah, Lord of the worlds. (Noah, 64)**Invalid source specified.**

¹⁰³ the Prophet, may Allah bless him and grant him peace, said, "If the Final Hour comes while you have a palm-cutting in your hands and it is possible to plant it before the Hour comes, you should plant it."**Invalid source specified.**

¹⁰⁴ The prime cause of cultural translation is the movement of people (subjects) rather than the movement of texts (objects). (Francis, 2nd Edition, 2014)

4.1.6.1. Ibn Khaldun's philosophy of "al-'umrān"

The term "al-'umrān" coined by Ibn Khaldun cannot be defined exactly in the English term "civilization" which was used by Rosenthal. Therefore, if we want to know "al-'umrān" within its philosophical dimensions, we must focus our minds on its relation to the Islamic religion, and the religion of Islam cannot be separated from the Qur'an and Sunnah, nor separated from the cycle of human life in all its details.

If we contemplate Ibn Khaldun's thought, we will find ourselves gradually understanding what he means by "al-'umrān". However, "al-'umrān" for Ibn Khaldun is based on human, and human is Allah's successor to the earth and human also, the wise being who bear the message of Allah in development and building the earth.

Thus, Ibn Khaldun was focused on using eloquent terms of human directly or indirectly which help attaining his cognitive achievement of "al-'umrān". Some of these terms are: "Human is a civilian by nature", "Human is the owner of thought and interpret", "Human is the son of his returns and traditions, not the son of his nature and temperament", "Human is closer to good than evil", "Human is a leader by nature according to the succession that created him", "Human is a servant voluntarily acting for divine orders and somehow for tribalism", "Human being able to bring benefits and push harm", "Human is the creator of his actions", "Human is a two-part complex, one physical and the other spiritual", etc.

Ibn Khaldun sees that if a person is corrupted in his ability to be moral and religious, his humanity is corrupted, and he becomes a manipulator. So how is it that these characteristics are not the basis on which al-'umrān is established through the meeting of individuals which leads to the formation and diversity of societies in the social, economic, political, geographical and demographic aspects. (El-daks2001 ◌)

Ibn Khaldun divides "al-'umrān" into two types: Bedouin urbanization "al-'umrān al-Badawi" and urban urbanization "al-'umrān al-hadhary". The distinction between "al-'umrān al-Badawi" and "al-'umrān al-hadhary" is based on the nature of economic life and means of livelihood, where the

people of Bedouin depend on their economic production on livestock and agriculture, while the urban people rely on industry and trade, that is, the difference in their pension in terms of Ibn Khaldun leads to the difference between "al-'umrān" and generations. (El-daks2001 .)

Ibn Khaldun goes further with the concept of "al-'umrān" and considers it to be what history tells us. In this sense, we can say that: Ibn Khaldun's "al-'umrān" philosophy is also an activation of history in its three dimensions of past, present and future, not just as a past. Therefore, as we have pointed out earlier that, history is based on the analysis and synthesis of societies based on the laws of their movement, origin, development to take lessons from them.

Abdul-al-Halim Aweys says that “al-'umrān” of Ibn Khaldun is, to draw the conclusions of social phenomena and their different laws according to the requirements of reality and not to be satisfied as only or interpret them within the intellectual philosophical orientations of the preconceived. Moreover, Ibn Khaldun concepts regarding "al-'umrān" is not only material issues, but it is a creative moral issues too. Which need to understand the philosophy of religion and Allah's creation by nonseparation between religion and state, and between history and society.

4.1.6.2. Ibn Khaldun's concepts of "al-'umrān" as researcher diligence

The concept of al-'umrān can be constructed for Ibn Khaldun through fifteen thoughts according to the researcher diligence:

1. al-'umrān is only based on the coexistence of people among each other.
2. "al-'umrān" is a combination of Bedouin (rural) and urban (civil) communities, both of which are extensions of each other.
3. "al-'umrān" must have a leader organized by laws inspired by religion or by status laws by the people themselves.
4. "al-'umrān" greatly magnifies or diminishes the practice of business and industry.

5. "al-'umrān" may magnify luxury because of the increase in business and industries and may deteriorate because of their absence.
6. "al-'umrān" is more its community's greater luxury because of the abundance of money, construction and trade, and vice versa.
7. the state and the system of government in "al-'umrān" cannot be separated from each other and each positively or negatively affects the other.
8. "al-'umrān" calls for cooperation between the people, because all the work are interpreting each other and necessary for all people.
9. prosperous al-'umrān is able to benefit from its natural and human resources in the best way possible and to maintain its sustainability and circulation, and perhaps this use between society itself or in cooperation with other societies as human interests dictate.
10. the injustice and aggression is a destroyer of "al-'umrān" as well as taking people's monies and their properties without reason or compensation or monopolization or imposing things not imposed by the law or assigning them to work without wage or controlling their monies by buying their crafts at the cheapest prices and then selling at the most expensive prices, in the name of usurpation and coercion in buying and selling. Also, "al-'umrān" is sabotaged when the violation of the importance of the five necessary purposes in Islam, namely, the preservation of religion, self, mind, offspring and money. However, imbalance in these purposes may be gradual and barely felt. Ibn Khaldun goes deeper regarding the ruins of, "al-'umrān" when he points out four political reasons:

- A. The integration of a weak state system under a powerful state system.
 - B. The seizure or control of one state over another by force, and to prove control is distorted and rejected everything that has to do with the state that has been seized or controlled, resulting in alternative developments.
 - C. The transfer of state power geographically from one place to another - for one reason or another - which affects the development in the first place and the surroundings because of the attraction caused by the new place or because of declining interest in the old place.
 - D. The introduction of laws and policies that are related to high taxes, high prices, or that generate racism among members of society, lack of control between religions and cultures, imbalances in existing cultures (current cultures) to be replaced by a new culture (resumed culture) or the expansion of occupation or colonization.
11. "al-'umrān" has a specific age no matter how long.
12. "al-'umrān" controls commodity prices in the markets, e.g. flourishing and booming, will lowering the prices of the necessary requirements and raise the prices of perfectionism requirements and vice versa. Also flourishing and booming of "al-'umrān" increases the cost of crafts. Ibn Khaldun had three reasons for such situation:
- A. the market demand for it;
 - B. the pride of the craftsmen with their skills; and
 - C. the need of the wealthy for such crafts, which make them pay more than the real price to get craftsmen products or attract their competencies.

13. "al-umrān" contains different urban levels and each of these levels, whether village, city, territory, region, etc. has ability to sustainable from other level through the recourses, skills and crafts collaboration.
14. Science abounds where it abounds "al-'umrān" and the variety of knowledge.
15. Ibn Khaldun believes that none of the conditions of "al-umrān" can be measured on another similar in one case, as they may differ in many other matters. Hence, we understand why ibn Khaldun's laws in history (which we have already reviewed) are important in controlling such urban measurement. However, Ibn Khaldun's history laws do not deal with measurement through fixed judgments or narrow personal opinions.

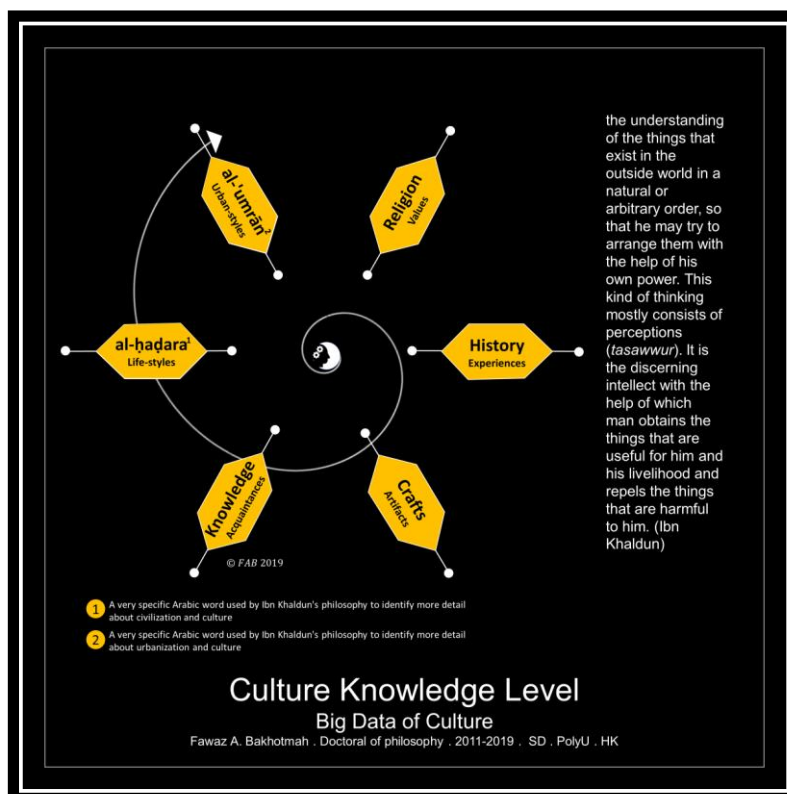


Figure 4.1 The culture knowledge level, it is a source of big data of culture. It contains six pillars to reach creative cultural knowledge from specific topics to a general conclusion (inductive reasoning), these subjects are: 1) knowledge of religion and values, 2) knowledge of history and experiences, 3) knowledge of products and services, 4) knowledge of science and education, 5) knowing of the civilization of cultural accumulation of past and present (life-styles) and 6) knowledge of architecture and urbanity (Urban-styles). concept: Fawaz A. Bakhotmah..

4.2. Paul Schafer¹⁰⁵

Schafer has been a cultural expert for more than four decades as a teacher, consultant, official and researcher who runs an online project called the World Culture Project. (Schafer, n.d.) Schafer considers culture to be a central focus of all our work and thinking. Most importantly, most of us are individuals and societies with little understanding of culture and do not know how to influence individual, institutional, community, regional, national and international affairs. Therefore, Schafer wanted to give culture his full interest, which was evident in his first book in 1998 entitled *Culture - Beacon of the future*. It is an important book for anyone who wants to know the culture as a holistic approach rather than a theoretical philosophical approach. It is an important book for innovators, designers and talented people, as it addresses the concept of culture and cultures across many disciplines such as arts, anthropology, sociology, philosophy, cosmology, environment, history, politics and economics ... He wants to make it clear that culture must play an important role in global development and humanitarian affairs for century 21. What makes Schafer distinguished in his efforts to make culture a source of innovation and design is that he is interested in three cultural issues:

First. In his formative years, Schafer tasted the values of art, design, creativity and innovation. He believes that culture without these facts cannot be understood or used. This dimension is clearly reflected in his book *"Celebrating Canadian Creativity"*, where he spoke about the value of creativity, innovation and design in Canada through his career. He wants to prove through the book that the Canadian people and their history have been creating and growing their own culture. This creativity is gradually transformed into the output of art, innovation and design in all sectors of the cultural life of food, clothing, shelter, transportation, communications, health care, arts, sports and science, as well as recreation, and natural environments.

¹⁰⁵ Paul Schafer (1937), a Canadian scholar in culture as a concept and as a Transition to new age. Author of five books in culture and cultures: *Culture - Beacon of the Future*, *Revolution or Renaissance: Making the Transition from an Economic Age to a Cultural Age*, *The Age of Culture*, *The Secrets of Culture*, and *Celebrating Canadian Creativity*.

Second. Schafer seeks to explain the importance of transforming the world order from an age-based on economy to a culture-based one, which addresses two of the most complex issues of economy and culture, as detailed in his book *Revolution or Renaissance* through detailed historical analysis and fun. (Schafer) considers the economic era in which we live as one that has produced a great deal of technological and industrial revolutions and plenty of financial wealth. The era of the economy unleashed a tremendous productive force, but in turn it is unable to address the problems threatening human and non-human life on earth; wars, famines, terrorism, health and environmental problems. So, he sees that the development of the economic era of Adam Smith "the wealth of nations" in 1776 to the present has not seen an alternative to a better world, although he sees the European Renaissance as a good model for his study¹⁰⁶. From this bold point of view, which is consistent with the thinking of innovators and designers, it was attentive to the importance of culture and its integration into the economy as a concept and reality for the future that achieves global harmony, environmental sustainability, economic reform and human well-being.

Third. Schafer supports, as we previously mentioned, the existence of a cultural era alternative to the economic era ... It was necessary to focus on how that can be achieved? What are the foundations, objectives and priorities? It is therefore necessary to adopt a global cultural vision, a cultural model of development, create a new environmental reality, meet human needs in all areas of life, and create an effective balance between physical and intangible dimensions that will result in great care, participation and global cooperation.

¹⁰⁶ The researcher agrees with Paul Schafer on the importance of the culture as an idea that generates a global harmony collaboration system among different people, which is, opposite from the negative thought of Samuel Huntington regarding the clash of civilizations. In contrast, the researcher does not agree with Paul Schafer on the basis that the European Renaissance is the preferable measure for the civilization or culture that suited his idea. Moreover, any such cultural thought will not succeed if the relationship between religions and cultures is weak. Therefore, the priority between them should be fully aware in proportion to the beliefs and values of people.

As a culture-based innovation, the researcher found that there are three main inputs that are important in the introduction of Schafer, which can be used to be part of the data that complements our findings previously with Ibn Khaldun and later with Malik bin Nabi. This data is a comprehensive definition of culture as a catalyst for action, not just understanding culture. The division of culture into approaches to facilitate their placement in production models, and the use of culture as a means of sustainable development, we will briefly explain this.

4.2.1. A Holistic Definition of Culture

Schafer's holistic culture definition is "an organic and dynamic whole which is concerned with the way people see and interpret the world, organize themselves, conduct their affairs, elevate and enrich lives, and position themselves in the world". (Schafer, 1998, p. 40)

4.2.1.1. An organic and dynamic whole

This definition contributes to a deep understanding of the content, characteristics and complexity of culture. It deals with historical experience, current realities and future needs. Schafer portrayed the holistic definition as a giant tree with roots, trunk, branches, leaves, flowers and fruits. The roots represent myths, religion, ethics, philosophy, cosmology, and aesthetics. The stem and branches represent both technological processes, political practices, social structures, environmental policies, and consumer practices, spiritual beliefs, and moral practices. By this approach, seven domains of culture are the products of abstract thinking based on organic and dynamic: "the relationships of people to themselves; to each other; to the objects, artifacts and systems they create; to the particular culture in which they are embedded; to other cultures; to the natural environment; and to the supernatural".

4.2.1.2. The way people see and interpret the world

That is how people see the world and how they interpret it through their religions, beliefs, values, ethics, philosophies and convictions associated with global laws, environmental conditions, global problems, mutual relations between mind and matter, and perceptions of changing time, space and universe.

4.2.1.3. The way people organize themselves

How people organize themselves through their decisions about economic, social, political, technological and scientific endeavors, military and defense endeavors, environmental policies and ecological practices; not to mention the development of villages, cities, regions, countries, cultures, and all forms of human civilization. According to Schafer, all these "elements" of cultural life are undergoing a profound change at present as a result of changing trade practices, globalization, changing demographic patterns, and new economic and political realities.

4.2.1.4. The way people conduct their affairs

How people deal with their affairs through the nature of their lives and the lives of their communities. In other words, the daily lifestyles and behaviors of people from spending and consumption, education, family life organization, personal priorities and practices ... At this level, the relationships of small components of micro-elements are identified by macro-elements, the ways people organize themselves and manage their affairs.

4.2.1.5. The way people elevate and enrich life

That is, how people strengthen their lives by religion and values, by education and training, by work and production, by their aesthetic preferences and by their civilized behavior ... and by all things that make their lives and the lives of their communities richer in their cultures and deeper in their ideas and richer and more meaningful.

4.2.1.6. The way people position themselves in the world

How people determine their global standing among nations in terms of geographical location, geopolitical situation, and regional cohesion. These factors play a crucial role in determining how people relate to their physical and moral environments at the level of communities, countries, continents and cultures. The potential for conflict and confrontation is clearly present in these cultural focal points, in particular as a result of the rapid change in demographic, economic, political, technological and social conditions.

4.2.2. Four Approaches to Culture

The second most important aspect of culture in Shafer is how to move forward in activating the culture when there are many different concepts, definitions and discussions about culture as we mentioned earlier, but at the same time we do not have practical classifications that make them effective tools as a system and development. He therefore suggests that culture be addressed through four approaches: the institutional approach; the practical approach; the theoretical approach; and the conceptual approach. While each approach has its own strengths and shortcomings, each approach contributes to the expansion and deepening of our thoughts towards culture as a comprehensive life system and a creative, practical and theoretical concept. The concept of each approach is explained below with one illustrative example.

4.2.2.1. The institutional approach

The institutional approach takes care of the culture, heritage, values, and related attributes from definitions and concepts by governments, companies, and institutions. It is an approach that often addresses political aspirations and administrative, planning, and economic issues to achieve the visions of the institution.

4.2.2.2. The practical approach

The practical approach is a way of using culture, heritage, and values among different strata of society within the details of daily life. This approach increases the circulation of culture in which there are more sources and outputs.

4.2.2.3. The theoretical approach

The theoretical approach focuses on basic cultural concepts, and searches for their original models in society. Therefore, it is an approach that treats culture as an original concept with its own data and values, preserving the personality of society through historical documentation, scientific dissemination, and investment in knowledge.

4.2.2.4. The conceptual approach

A conceptual approach is a philosophical approach that discusses cultural concepts from multiple sources of knowledge, the most important of which

are philosophy, art, education, psychology, history, sociology, ecology, biology, and anthropology. This approach is often developed through the definitions and concepts of the cultural depth of the scientific, social, or economic fields. It has its scientific orientations and specificity. The thesis will provide more details about that.

4.2.3. Culture as development model

Schafer explains that there are many ways to activate development and identify its inputs and outputs. As development relates to human needs, people have a variety of needs that lead to a range of complex relationships: economic, scientific, artistic, educational, recreational, spiritual, technological, political and environmental. It is therefore necessary to put in place development models that are compatible with this task. These models must be capable of meeting all needs and must be capable of controlling many different problems, including environmental requirements, the use of renewable and non-renewable resources, inequality in the distribution of wealth and income, poverty, pollution, unemployment, hunger, health care, education, The development crisis, the need for safety and security, and many more.

Schafer proposed a model of the cultural model of development, based on the fact that man is the object of development on both its physical and moral sides, in the sense that the great priority in hi-development is for human happiness and well-being, not only for products, profits, capital accumulation, consumption, technology and market speculation. This can only be achieved through the full integration of the natural, historical and global environment into the development equation, as well as the recognition that development is a comprehensive interactive activity rather than a unilateral and partial activity. It cannot be activated by only dealing with culture and cultures in a holistic manner and this means the need to develop all the components of culture and not only the parts of them.

Schafer also argues that the proposed cultural model addresses two of the biggest shortcomings in the current development models: First, the natural, historical and global environment is not considered in all development planning and decision-making.

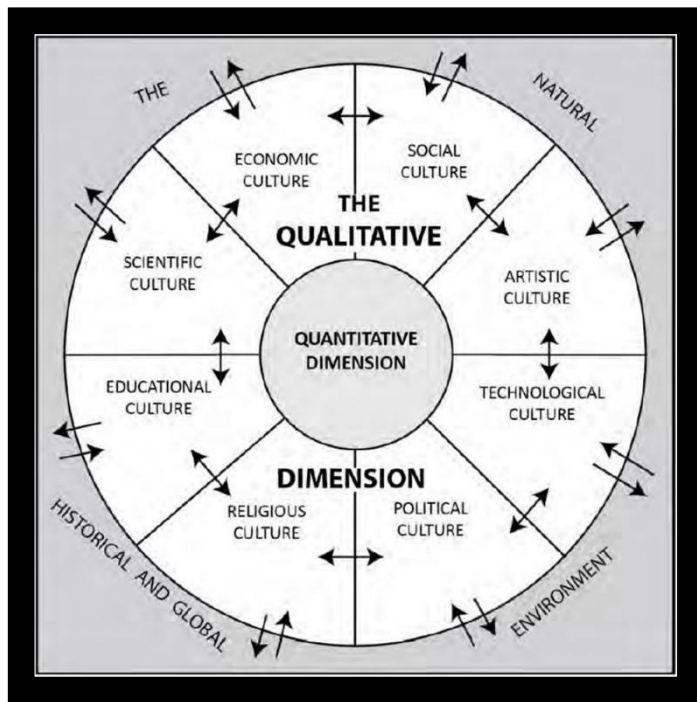


Figure 4.2 A cultural Model of Development. Source: Paul Schafer, Author of The Age of Culture book, 2014, page 111.

Second, to continue to address development as a one-sided process involving the economy rather than an interactive process involving all sectors of society. Schafer believes that if the cultural model works, it will have a very strong impact on public and private policies, practices and lifestyles around the world. It will have the pros in addressing social, cultural, social, educational, health, political, aesthetic and spiritual issues as it is to address economic, business, industrial, commercial and technological. This will motivate people to innovate and create opportunities and a high quality of life because the economy is no longer the core of the development process. (Schafer, 2014, p. 110)

The cultural model for Schafer operates through a mechanism consisting of six pillars (see figure 4.2) The following is a quotation of exactly what the author wrote about this model:

1. *culture as a whole and cultures as wholes (the complete circle);*
2. *the component parts of culture and cultures (the various sectors - economic culture, social culture, artistic culture, technological culture, political culture, religious culture, educational culture, and scientific culture - that comprise the complete circle);*

3. *the relationships between the component parts of culture and cultures (the interactive arrows between the various sectors of the circle);*
4. *the relationships between the component parts of culture and cultures and culture as a whole and cultures as wholes (the interactive process that occurs between the various sectors of the circle and the complete circle);*
5. *the relationship between the quantitative and qualitative dimensions of culture and cultures (the connection between the inner and outer components of the complete circle); and*
6. *the relationship between culture and cultures and the natural, historical and global environment (the interactive arrows between the complete circle and the vast expanse beyond the complete circle).* (Schafer, n.d.) Figure 4.3 shows The propose culture cognitive level.

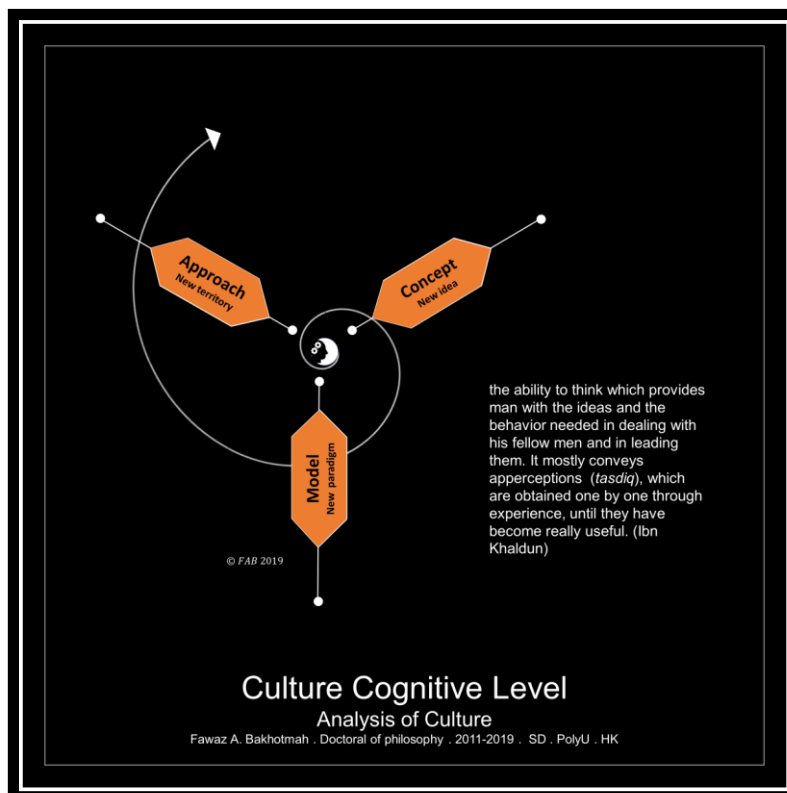


Figure 4.3 The cognitive culture level, it is an analysis of big data of culture. It contains three cognitive pillars: 7) Defining the general concept of the cultural knowledge on which the information was collected. 8) Deciding the general concept of the most appropriate cultural approaches. 9) Building the cultural or heritage model as a product, a theory, an experience or benefit that can be used developmentally. However, these three cognitive pillars could be used as deductive reasoning for some cultural facts. concept: Fawaz A. Bakhotmah..

4.3. Malek Ben-Nabi¹⁰⁷

Malik bin Nabi is considered one of the most important Arab and Muslim scholars of the twentieth century, who specialized in the problems of civilization and culture that the Islamic nation suffers in general and particularly Arab nation. He is the most modern Islamic thinker in the 20th century. For most Islamic thinkers in the modern era, he is considered the reformer and developer of the ideas of the Arab-Muslim Ibn Khaldun. He whispers in the nation's awareness of the language of the age. He exposed its diseases, understanding the philosophies of modern civilization, describing the causes of the revival of societies and the status of colonization. Control of the vulnerable nations, especially the Muslims, and set them the equations and laws of "civilization take-off". (Redh2013 ,) Malik bin Nabi was able to disassemble and structure the issues within their real dimensions of urbanization - according to the term of Ibn Khaldun - or the so-called human sociology today as previously discussed. Therefore, the reality seen in Malik bin Nabi, as in the case of Ibn Khaldun, has implications in judging the course of things as a basic approach in dealing with the issues they discuss, even if they oppose the historical phenomenon, they used the dialectical methodology based on the spirit and instinct in its civilized environment.

Malik bin Nabi considers culture (the philosophy of man) in capitalism, and (the philosophy of the community) in socialism and the (philosophy of life) among Muslims. The Muslim is required to worship Allah by building the earth. He was optimistic that Arabs and Muslims are capable of being a prosperous, productive and competitive nation. The paths of life as they were in their golden age, provided they adhere to their religion and renew their culture by purifying it of the past and the depressing dependency, so that it can then be linked to a life of progress and prosperity. This renewal of culture is considered by Malik bin Nabi a Qur'anic approach because it always urges Muslims to distance themselves from the ignorance of the past and search for the future, progress and prosperity. Therefore,

¹⁰⁷ Malek Bennabi (1905–1973) was an Algerian writer and philosopher, who wrote about human society, particularly Muslim society with a focus on the reasons behind the fall of Muslim civilization. He is mostly known for the concept of coloniability which is the inner aptitude of some societies to be colonized. According to Malek Bennabi, the lack of new ideas in Islamic thought emerged with what he coined as civilizational bankruptcy. He argued that in order to recover its former magnificence, Islamic society had to become an environment in which individuals felt empowered. In order to satisfy his spiritual and material needs, a Muslim needed to feel that his industry and creativity would find reward. (Wikipedia, n.d.)

it is not surprising that Malik bin Nabi's philosophy of life is first and foremost a cult from which close ties promoting the cohesion of culture and urbanization and civilization stem.

Ibn Nabi considers culture as a theory in the art of behavior rather than a theory in the knowledge. (Nabi ,2000 ,p. 73) Al-umran is a theory in the ability to produce, prosper and progress more than to be for consumption, well-being and the pursuit of fancy. The civilization is the true measure of the achievements of the nation based on their beliefs, culture and architecture. In order to understand the importance of Malik bin Nabi's role in activating culture as a renewed concept and motivator for thinking, we must understand his vision of culture in the Arab and Islamic worlds to be able to give in similar ways to the creative societies. It is possible to summarize his vision through two philosophical systems: the first is the structure of culture from four dimensions: morality, beauty, work, and industry. This system interacts with the second system, which revolves around philosophical ideas about civilization and culture; researcher named by "Malik bin Nabi's thinking trilogy"¹⁰⁸ as we will discuss this later.

4.3.1. Malik bin Nabi's four dimensions of culture

Malik bin Nabi explains that every culture must involve ethics as a principle, beauty as taste, work as a logic, and industry as a technique and progress. If the focus is on the moral principle, culture is transformed into a mystical way. Moreover, if one works in culture from a practical point of view, the result will be engineering and urban without spirit, but if the focus is on industry and technology and the like, it will become a cultural orientation closer to the logic of the Communist. (Owaisi, 2012, p. 548) For the importance of these four dimensions and understanding their significance in culture, we summarize them as follows:

4.3.1.1. Culture as an ethical behavior

Culture as an ethical behavior is "a set of moral traits and social values that affect the individual from birth and unconsciously become the relationship between his behavior and the way in which he was born." (Nabi, 2000, p.

¹⁰⁸ An intellectual theses of three linguistic vocabulary to convey a specific cultural or civilizational concept as written by Tuhami Majouri under a topic in the Arabic language in the name of (ثلاثيات مالك بن نبي)

74) In order to control culture within its true ethical standards, Malik bin Nabi sees that dealing with it must be based on two historical and educational dimensions. He says "it is our duties that our culture should return to its true level, and therefore we must define it as a historical factor in order to understand it. Then it must be an educational system that is applied so as to spread it among the strata of society" (Nabi, 2000, p. 76) Culture through history is "that blood in the body of society feeding its civilization, holding the ideas of the (elite) and the ideas of (public). It is the one that gives civilization its splendor from details that bear homogenous habits, close aggregates, integrated traditions, proportional tastes and similar emotions. Education through culture is concerned with all strata of society. It interferes in the affairs of the individual and in the building of society. It deals with the problems of leadership as well as with the problems of the masses. Therefore, culture as morality for Malik bin Nabi is not a philosophical given but rather a social one rather than a philosophy of ethics. It is the pursuit of a historical unity of ethics and behavior based on religion and the life in order to achieve the interdependence of society and the organization of relations among people. (Mahfouz, 2007)

4.3.1.2. Culture as an aesthetic tendency

Culture as an aesthetic tendency is inseparable according to the opinion of Malik bin Nabi on the moral orientation. The content and form are inseparable, which took a great part of the civilization of Muslims and Arabs until the Muslim reached the top of charity in work and chose the best in behaviors. (Nabi1986 ,) This tendency is summed up in the fact that morality, goodness, honesty, love, and all these high-end behaviors cannot be conceived without aesthetic that generating ideas and actions at the level of individuals and societies. (Nabi2000 ,) They are the ones that inspire creativity and innovation and create a delicate artistic sense. (Nabi1986 ,) For this reason, Malik bin Nabi established a law that combines morality and beauty, which is "moral principle + aesthetic tendency = civilization/cultural orientation." (Nabi1986 ,) The arrangement here is very important because it defines the specificity of the cultural orientation of each society, Western people for example, "the aesthetic tendency " is first because of their

acquired Greek and Roman heritage. While, Muslims “the moral principle” is first, however, this lofty dimensions have gained from the Islamic culture that made the golden age of Muslim for centuries.

4.3.1.3. Culture as a practical logic

Culture as a practical logic in Malik bin Nabi is "the connection of work with its means and purposes, so as not to underestimate or stray anything without a scale, deriving its standards from the social milieu and its potential" (Nabi, 2000, p. 85) This means that culture as a practical logic is the utilitarian arm of the hard work toward the embodiment of culture as morality and beauty on the ground, and "deriving the maximum benefit from certain means" (Redh, 2013, pp. 95-96) It is a connection between work and its objectives, between politics and its means, and between culture and others, also linking them between ideas, and the achievement of all these. It is an "applied mind which is embodied in will and exerting effort and perseverance in order to acquire knowledge or gain skill. (Brion, 2010, p. 228) Malik bin Nabi believes that the Islamic and Arab nation today is in dire need for both practical logic and practical reason. "We need this practical logic in our lives, because the abstract mind is available in our country, but the practical mind which is essentially of will and attention is something that is almost nonexistent (Nabi, 1986, p. 95).

4.3.1.4. Culture as an artistic and industrial application

Culture as an artistic and industrial application at Malik bin Nabi dates back to the depth of the Islamic civilization, which is concerned with all the arts, professions, abilities and applications. Even grazing sheep in Islamic civilization is an industry! Industry "for the individual means to earn a living and perhaps to build its glory, but the community is a way to maintain its existence and continued growth" (Nabi, 2000, p. 88)

4.3.2. Malik bin Nabi's trilogy of culture

Trilogy of Malik bin Nabi proves the depth of his philosophical thought about culture and civilization that is based on the previous four dimensions of culture. These are:

4.3.2.1. Man, Soil and Time

Some would call it (man, universe and life). Malik bin Nabi means that man is the basis of life on earth. He is the thinker of its reconstruction or destruction and the beginning of his creation is from dust and at the end of his life he returns to dust and between this and that is the time that man invests from birth until his death. (Nabi, 1986)

4.3.2.2. Spirit, Mind and Instinct

The stage of the spirit is the stage of giving, growth and aspiration to the ends of the societies. The mind represents the stage of stability and the cessation to ask for more raw material, and the transition to production and diversification, stopping the radiation of the soul from delivering the torch to the mind to work logic on balance between giving and taking, and quantity and type, and between speed and slowness, between stagnation and movement, right and duty. The third stage is instinct, which is very similar to the stage of aging, where the mind does not have full authority over movement and action, so civilization, society and the individual lose the level of effectiveness that aspires to rise; it turns into emotions and reactions. The instinct stage is to stop the spirit from lighting the way, and the disappearance of the reason for control and influence and guidance. (Nabi, 1986)

4.3.2.3. Ignorance, Poverty and Colonialism

Malik bin Nabi considers that this triad of words destroy societies and sweeps them out of existence because they are synonyms of ignorance, disbelief and Satan respectively. There is no greater evil that afflicts individuals and groups and weakens their relations with one another, than these trilogy whether together or separate (Magouri, 2015)

4.3.2.4. Before civilization, Civilization, after Civilization)

Malik bin Nabi's civilization is "material and moral conditions that enable people to carry out their duties and gain their rights in the social framework." Therefore, civilized in the view of Malik bin Nabi is not the person who boasts the consumption and use of "civilization products", but is a person who deals with the values of his civilization on the ground of rational and practical. On

the other hand, Malik bin Nabi considers that the pre-civilization society is the society of instinct, which has never seen civilization before. It is a society that is easy to build and ready to receive the "civilizational act." In contrast to the post-civilization society, a society decomposed of the civilized, had a civilization lost. "This society is not easy to rebuild because of the remaining stock of the distorted civilized, so it has to be emptied of the distorted content and then filled it by the acts of new civilization. (Magouri, 2015)

4.3.2.5. Present, History and Future)

In this trilogy, Malik bin Nabi always wonders about the role of man in the events and realities of history? What causes and natures have led to the transformation of people, systems and states throughout the ages? He then wonders how history turned into a constant bar of championships and defeats? How does history shape the future through past and present facts ? "It is as if Malik bin Nabi wants to say, by presenting this trilogy, that history is made by people, to deal with reality and to foresee the future. All of this, as well as the past is important. There is no priority for one of these three elements, as some people may think. " (Magouri, 2015)

4.3.2.6. Dead idea, Deadly idea and Right idea)

The dead idea is a cloned historical idea, which does not respond to the requirements of reality. Because the variables of reality do not always allow the reproduction of past experiences. The deadly idea is the idea imported from another culture, it is not a culture of society and its intellectual and doctrinal references, the uprooting of its land and its surroundings, make it a fatal idea; because it is a good drug to treat a disease, it provides for the treatment of another disease, so it becomes lethal instead of being curable. The correct idea is the idea that corresponds with knowledge, which is correct according to the opinion of Malik bin Nabi, it is the theoretical health, and remains to be imposed on reality, the question posed is; is it appropriate or is it not? This requires further evaluation in the assessment of Malik bin Nabi, and the provision of the necessary conditions as well as the absence of impediments, otherwise it all becomes ineffective while remaining theoretically correct.

4.3.2.7. Thought, Work and Money)

Thought is the origin of every socio-cultural-economic and political movement, and every poor system in intellectual production is undoubtedly poor in all areas too; because the mind is the spirit of creativity and innovation and addition and a step away from tradition and paganism and cloning, but work is the natural crop of serious thought away from illusions. The work is to transfer ideas to investment projects in all areas serving the community. Money is the complement to the process of human reality, not its origin. There is a pertinent question that I'd like to use as an example; "If we assume that Washington has been shattered, can we rebuild it with Washington's golden balance?" The balance of communities in gold is usually small, but it can be rebuilt with the social balance. That is, the stock of American society's effort as a civilized society can build up its shattered city. The intellectual stock is high, and the level of work is also high. Money is a mobile cash block among the community groups.

4.3.3. Realms of Things, Persons and Think

The realms of things, people, and ideas are also three of Malik bin Nabi's trilogy. The most important of these is the fact that the relationship of the societies to the realms of things, people and ideas is governed by the stages of life, such as the stages in which the child goes through. First, through "things" in the first stages of evolution; the luxury car, palace and the amount of money is a testament to the value and level of the human being. Second, through "people" to make them models of success and failure. However, deeds do not mean anything separate to their owners, nothing is be good or bad except when done by such person or that, good or bad. Third, through "thinking" when society becomes within the stage of ideas which able to ruling on things with honesty or corruption and on people to success or failure.

These three realms do not work separately; they work together according to the "realm of ideas" to activate the "realm of things" to satisfy the "realm of people." The historical work is necessarily made up of people, ideas and things. Therefore, the corrupt relationship in the realm of persons has its rapid consequences in the realm of ideas, in the realm of things, and the societal downfall will afflicts the realm of people inevitably extends to ideas and things.

To demonstrate the thought based on the realms of things, people and ideas, Malik bin Nabi struck three wonderful examples that illustrate the importance of society's interaction with history and civilization. The first and second examples are related to the Arab-Islamic civilization where the importance of using intellectual abilities through self-knowledge to develop the treasures of civilization is not used. The third example is related to the beginnings of the formation of modern Western civilization.

4.3.3.1. First example; the wisdom of Muhammad PBUH

In which he used imagination and wonderful visualization to give ideas, people and things their mental value and social effectiveness.

Messenger of Allah (ﷺ) said, "The similitude of guidance and knowledge with which Allah has sent me is like a rain which has fallen on some ground. A fertile part of earth has absorbed water and brought forth much grass and herbs. Another part, which is solid, held the water and Allah benefits men thereby, who drank and gave others to drink, and used it for irrigation. But some of it has fallen on a portion of sandy land which neither retains the water nor produces herbage. Such is the likeness of the man who understands the religion of Allah and who gets the benefit of what Allah has sent me with; he learns and teaches others. It is also the likeness of the man who neither raises his head on that account (meaning he does not benefit from what the Prophet (ﷺ) was sent with) nor accepts Allah's Guidance with which I am sent". (sunnah.com, n.d.)

Malik bin Nabi says that this wisdom gives us an imaginative view of the relationship between the individual and the society with science, i.e. people, ideas and things. As when the Prophet PBUH tells us that the community goes through three stages: 1) the stage of acceptance of ideas and creations and generation through the realm of people, 2) the stage of the implementation of ideas and communicated to other communities through the realm of things, 3) a stage free of the realm of ideas becomes the realms of people and things away from social efficiency. This reflects Malik bin Nabi in the Islamic community. He says that the Muslim societies in the era of Al-

Farabi¹⁰⁹ created ideas and that it was at the time of Ibn Rushd¹¹⁰ reaching Europe. Unfortunately, After Ibn Khaldun, Muslim societies has no longer capable of creation or of reporting.

4.3.3.2. Second example; the intellect of Ibn Khaldun

Ibn Khaldun, whose most important ideas we discussed earlier. Malik bin Nabi said that Ibn Khaldun's intellectual had appeared in the Islamic world, it was an idea that had absolutely nothing to do with the social that time, therefore, did not contribute to their mental or social progress. In other words, Ibn Khaldun's thought came at the beginning of the third phase of Muslim societies, where the Arab and Islamic nation was still trying to rid itself of its civilizational decline.

4.3.3.3. Third example; the apple and Newton

Third example is to prove that the cultural value of things has a great relationship with the realm of people and their place of existence in the system of life, so Malik bin Nabi says that when the apple fell on Newton he did not eat it, but obtained from it the meaning. however, that society was living in the beginnings of the first stage of accepting and using ideas, while, in such situation, the relationship between the individual and the way of life is mutually (Nabi, 2000, p. 49)

Thus, Malik bin Nabi concludes that the vitality of the culture in which society is raised is the life without which it becomes a dead society. In other words, the Arab and Islamic nation was replete with treasures of science and knowledge, but it was not used in the era of Ibn Khaldun, to this day it is still not used, because of its traditional and limited cultural activity, while these sciences and treasures when translated into multiple languages contributed to the establishment of societies of

¹⁰⁹ Abū Naṣr Muḥammad ibn Muḥammad al Fārābī; known in the West as Alfarabius (872 - 951) was a Muslim scholar. He was a renowned philosopher and jurist who wrote in the fields of political philosophy, metaphysics, ethics and logic. He was also a scientist, cosmologist, mathematician and music scholar

¹¹⁰ Abū l-Walīd Muḥammad Ibn 'Aḥmad Ibn Ruṣd (1126 – 1198), often Latinized as Averroes was a Muslim Andalusī philosopher and judge who wrote about many subjects, including philosophy, theology, medicine, astronomy, physics, Islamic jurisprudence and law, and linguistics. His philosophical works include numerous commentaries on Aristotle, for which he was known in the West as The Commentator. He also served as a judge and a court physician for the Almohad Caliphate.

scientific and industrial progress, and the reason is that these communities enjoy a brilliant cultural vitality that leaves them to thought, science and industry.



Figure 4.4 The culture interactive level, it is a synthesis of analysis of culture. It contains three pillars: 10) an approach that gives "the thing" the greatest interest, 11) an approach that gives "thinking" the greatest interest, or 12) an approach that gives "people" the greatest attention. concept: Fawaz A. Bakhotmah..

Malik bin Nabi explains that each community has its cultural vitality, which must be built and developed to suit its aspirations. In order to understand this trend, Malik is an example of the Muslim Caliph and the Muslim shepherd, with their different professional composition, but in his opinion, they are characterized by one behavior because the roots of their personalities lie in one land, the spiritual sphere of Islamic culture. On the other hand, an example of an English doctor and a Muslim doctor is observed where their behavior is different because their roots do not sink into the land itself, although their professional composition takes place within the framework of a single technical approach. Therefore, dealing with culture must be specific and cautious. Each culture has its own existence, and its components are not a choice. It is a context for its surroundings, which includes messages expressing colors, sounds, smells, movements, shadows, lights, shapes and images. (Nabi, 2000, p. 57) All of these factors must be within our cultural thinking. They are the practical images of ideas that later turn into products, services and artistic forms in all aspects of life. Figure 4.4 shows the propose culture interactive level.

4.4. Culture Apperception Criteria (CAC)

Based on the above literature of Ibn Khaldun, Malik bin Nabi and Paul Schafer, and to recognize the culture to be among the tools (design thinking), which help to find new material and moral outputs, linking the authenticity of the past, present and future aspirations. The researcher created the so-called Culture Apperception Criteria (CAC), a mechanism that studies and analyzes the four components of the system, pattern, elements and practices for the purpose of assembling them into new ideas, innovations and designs. CAC operates through three levels; each level contains criteria. These criteria help to understand, analyze and synthesize the cultural component within non-traditional goals and visions that conform to the spirit of the times and interact with future scenarios. The proposed criteria can be summarized as follows:

4.4.1. Culture Knowledge Criteria (Big Data of Culture)

The culture knowledge Criteria is the first level of six criteria. These criteria are derived from the philosophy of Ibn Khaldun, which is one of the most important components of the cultural knowledge of any nation. It is not possible to understand the existing or proposed cultural components except through these criteria:

4.4.1.1. ad-Dīn (The Religion)

To activate culture within innovative concepts that help to innovate, we must understand that religion or belief is related to culture in both its material and moral aspects. Culture in Islam is the product and output of its Islamic religion, which is derived from the Quran and Sunnah, and not vice versa! That is, religion is not the product of a culture that can be the source of reason and philosophy. The importance of this must be linked to the researcher on a solid scientific basis to indicate which of the two approaches must be taken. To quote T.S. Eliot regarding this matter:

"The first important assertion is that no culture has appeared or developed except together with a religion: according to the point of view of the observer, the culture will appear to be the product of the religion, or the religion the product of the culture" (Eliot, 2013, p. 87)

From this point of view, the researcher in culture-based innovation can proceed from the base that suits the cultural data that he deals with as creative, innovative or designed. This is the problem of other beliefs with Islam today, especially the West, where they want the religious dimension of Islam to be compatible with the cultural and philosophical dimension of their beliefs, making the racism and differences more visible than convergence and tolerance, which causes us to lose numerous ideas and innovations.

On the other hand, there is a link to innovation in religion, religion in Islam is not only for worship. It is an integrated life system stemming from science and work as stemming from beauty and innovation. *Bryn Barnard*¹¹¹ says:

Islam is one of the world's great religions, one of history's most important civilizations, and one of the foundational cultures of the West. During Islam's first five hundred years, from the seventh through to the twelfth centuries, this new religion created one of the most innovative and influential civilizations on earth, an essential bridge between antiquity and modernity. For many more centuries, the Islamic world remained a center of learning, wealth, luxury, and sophistication, envied and imitated by its neighbors. By the sixteenth century, when parts of the Islamic world had begun to be eclipsed by Western colonial nations in military, economic, and social power, Islam had left its mark on everything. The books we read, the music we play, the words we speak, the numbers we count, the clothes we wear, the food we eat, the science we depend on—all were shaped, at least in part, by Islam" (Barnard, 2013, p. Location: 35)

As Ahmad Dallal¹¹² says about understanding science in Islam is a harmony between religion and philosophy:

¹¹¹ An American illustrator, author, artist, teacher and lecturer (<https://www.brynbarnard.com>)

¹¹² Ahmad Dallal, an associate Professor of Arabic and Islamic Studies and Chair of the Arabic and Islamic Studies Department at Georgetown University (<http://explore.georgetown.edu/people/asd6/>)

Any understanding of the cultural significance of Islamic scientific thought requires an evaluation of the relationship between science and philosophy and between science and religion (Dallal, 2010, p. 225)

Firas Alkhateeb¹¹³ says that working in Islam is a cult:

Unlike European astronomers, however, Muslims would not be harassed by the religious establishment for their views. Scientific endeavors were seen, after all, as a form of worship (Alkhateeb, 2014, pp. Location: 1,043)

Finally, Jonathan Lyons¹¹⁴ says that the inspiration of religion is a means to come closer to Allah:

At first, Muslim thinkers, unlike their medieval Christian counterparts, found religious inspiration to pursue knowledge as a way to come closer to Allah. Tensions between the demands of faith and reason arose only later (Lyons, 2011, pp. Location: 1,202)

There is a close connection between religion and culture, and religion has never been an obstacle to science and innovation among Muslims, but it was the first catalyst for prosperity and progress. This leads us to conclude that the use of culture as an input to innovation must not ignore religion, it is important to develop its multiple models, and this is not without studying history and tracking periods of prosperity and collapse. We can therefore say without hesitation that peoples or societies with religions must make their religion the first source of culture-based innovation.

4.4.1.2. at-Tārīkh (The History)

What Ibn Khaldun reached six hundred years ago to link history with the reality of societies and the development of its laws and knowledge of its development is to convince that history is a living entity inseparable from the

¹¹³ Firas Alkhateeb, an American researcher, writer and historian who specialises in the Islamic world.

¹¹⁴ Jonathan Lyons is the author of *The House of Wisdom: How the Arabs Transformed Western Civilization*

life of societies, it moves between the past, present and future. History of this vision is an art of design, when we talk about it professionally it is much deeper than a product or service, it is a realm of creativity overlapping and interactive with past, present and future issues, says Kjetil Fallan:

"design culture is not elite culture, but everyday culture, and it is best explored through historical analysis. Perhaps the most interesting aspect of design as a field of historical inquiry is its many guises of inherent ambiguity, its essential tension between ideology and practice, between mind and matter, between culture and commerce, between production and consumption, between utility and symbol, between tradition and innovation, between the real and the ideal." (Fallan, 2010, p. Location: 63)

As innovations significantly grow in the arms of private entrepreneurs (The World Bank, 2010, p. 3) their major transformations and the resolution of complex crises were to encourage governments to innovate and this can only be known by history (Johnson, 2010, p. 226) Figure 4.5 shows the World Population Growth and Major Technological Events, 9000 BC to Present

"In world history, the first major technological innovation was probably the development of agriculture as far back as 9000 BC, followed by the development of pottery in about 6000 BC. Other important innovations were the development of the plow and irrigation between 5000 BC and 4000 BC, which facilitated growth of the world population. The development of metallurgy and writing dates from around 3000 BC. The development of mathematics dates from about 2000 BC. (The World Bank, 2010, p. 32)

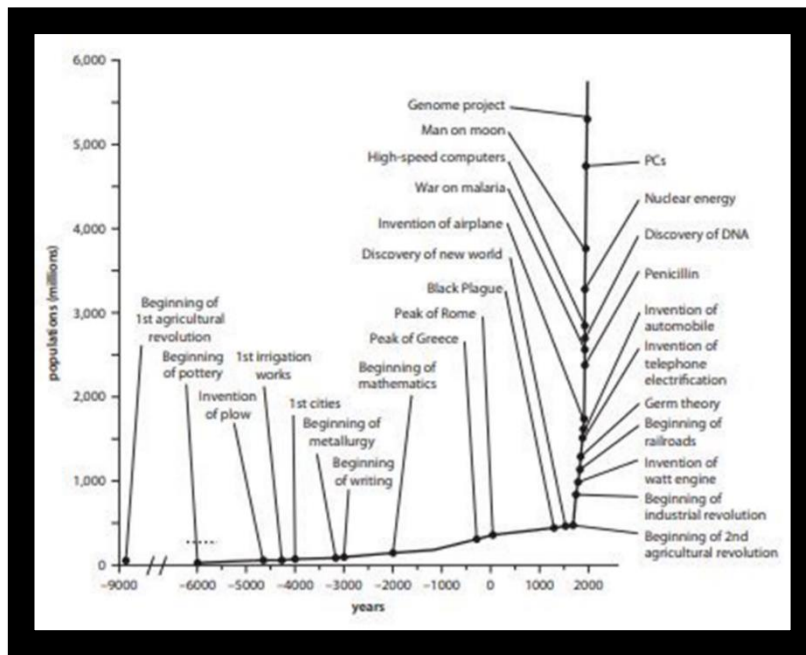


Figure 4.5 World Population Growth and Major Technological Events, 9000 BC to Present.

Source: Innovation Policy: A Guide for Developing Countries, The World Bank, 2010, page 32.

This proves what Jon Sundbo has written about the importance of knowing history in the sustainability of innovation, he says

To delimit and justify the paradigms that can be seen in the various innovation theories, it has been necessary to go to the historical roots of innovation theory. Part of the analysis thus also consists of clarifying the origins of the different theoretical views. These origins are to be found in the development of trade and industry in society. This part of the analysis will be empirical. (Sundbo, 1998, p. 2)

History has another importance at The World Bank, which is to face future challenges.

History has shown that times of crisis are also times of innovation, when institutional, mental, and other obstacles are more easily removed. The time is thus ripe for mobilizing creativity and entrepreneurship to meet the challenges ahead. The government and other leaders have a key role to play. Government can innovate in public goods and in finding ways to carry out its business more effectively. Most

important, it should help provide the right environment for innovation. (The World Bank, 2010, p. 23)

It is noted that there is a close link between history and culture and that history is a catalyst for the prosperity and progress of nations, provided that it is explored and exploited from its present and future events, and not only as a source that only tells the events of the past. We can confidently say that peoples and societies descended from the origins of great civilizations must make their history a second source after their religion stimulates the activation of Culture-Based Innovation.

4.4.1.3. *aş-şanā'i'* (Crafts)

Muhammad al-Quds says that work and art have social and economic dimensions in Ibn Khaldun's thought and are a central part of his thinking. He was keen to highlight the importance of work and the arts in society and to highlight the interrelationship between society and the arts. He was also keen to show the importance of the state in the progress or backwardness of the companies. Al-Sanaya flourishes in the prosperity of the state and attacks its weakness until it disappears. (El-daks2001 ,) It also refers to facts confirmed by Ibn Khaldun, for example: Linking it to practice and learning through modeling and science, which leads to innovation, invention and continuous discoveries, which helps the development and renaissance of the peoples and communities, so the craftsmen grow increasingly proud, improve their products and exploit their work. On the contrary, it is true that the shortage of goods leads to the destruction of societies and their governments, a fact that is in line with the principle of linking *aş-şanā'i'* and *al-'umrān*, a worthy theory.

The researcher believes that *aş-şanā'i'* philosophy of Ibn Khaldun and the level of its activation and interference affect the level of civilizational leadership and urban competition for human societies. It is not possible for *aş-şanā'i'* to reach this effect except through: first, the example based on the inspiration of the greats. Second, knowledge based on experience. Both are related to the religion and history that we have already reviewed, and

they also have to do with the formation of explicit knowledge, the civilization and the architecture of the societies that we will tackle.

As for the first issue that, aṣ-ṣanā'i' needs an example based on the inspiration people. Religion and history, which we have already discussed, as a method cannot be marginalized in the formation of such inspiration people. The researcher believes that Ibn Khaldun has proven (directly or indirectly) that the values stemming from religion and the lessons that history dictates are important in the flourishing of industries and their sustainability within the cultures of societies. These values and lessons, are always within the components of the conscious and powerful leadership personality, with the ability to lead the community towards a spectrum of aṣ-ṣanā'i' based on creativity, innovation, and away from dependence or infringement of the values and virtues of other religions and cultures. The researcher arrived at this conclusion through the Ibn Khaldun concept of the psychology of the Arabs when he pointed out that for the Arabs to be influential in their culture, to be producers and competitors in their work, they require a conscious leadership respecting religion and understanding history as Ibn Khaldun explains:

When there is a prophet or saint among them (Arabs), who calls upon them to fulfill the commands of Allah and rids them of blameworthy qualities and causes them to adopt praiseworthy ones, and who has them concentrate all their strength in order to make the truth prevail, they become fully united (as a social organization) and obtain superiority and royal authority. Besides, no people are as quick (as the Arabs) to accept (religious) truth and right guidance, because their natures have been preserved free from distorted habits and uncontaminated by base character qualities (Ibn-Khaldun, 1377)

For Muslims in general, Arabs and non-Arabs, their example in this regard is the Prophet Muhammad PBUH, the messenger of Allah and an inspiring leader who has the qualities of inspiration throughout history. In fact, this

status is not a claim of Muslims, but was confirmed by many non-Muslim thinkers, philosophers and writers, as we discussed this issue in detail at the first chapter.

The second thing about Ibn Khaldun's philosophy of *aş-şanā'i'* is to make it a sustainable and renewable culture by linking it to its knowledge content or what is known as the implicit knowledge based on experience and transforming it into a explicit knowledge that will be used in civilizational leadership and urban competition. This implicit knowledge we can recognize it (directly or indirectly) through many of the concepts of Ibn Khaldun's texts, and here we give an example that illustrates the importance of the implicit knowledge of Ibn Khaldun in the field of industry and learning and then the process of integration between them, and the explicit knowledge:

It should be known that a craft is the habit of something concerned with action and thought. In as much as it is concerned with action, it is something corporeal and perceptible by the senses. Things that are corporeal and perceptible by the senses are transmitted through direct practice more comprehensively and more perfectly (than otherwise), because direct practice is more useful with regard to them. A habit is a firmly rooted quality acquired by doing a certain action and repeating it time after time, until the form of (that action) is firmly fixed. A habit corresponds to the original (action after which it was formed). The transmission of things one has observed with one's own eyes is something more comprehensive and complete than the transmission of information and things one has learned about. A habit that is the result of (personal observation) is more perfect and more firmly rooted than a habit that is the result of information. The skill a student acquires in a craft, and the habit he attains, correspond to the quality of instruction and the habit of the teacher. (Ibn-Khaldun, 1377)

It is clear from this text that Ibn Khaldun was dealing with an implicit knowledge and explicit knowledge with harmonious interplay to complement each other's goal of seemingly reaching advanced levels of cognitive creativity and to new concepts in the sustainability of aş-şanā'i' as quality and innovation.

Whoever reads Islamic history, particularly Arab history, finds that implicit knowledge was one of the fundamentals of aş-şanā'i' that passed through generations through the transfer of skill, where skill was an art difficult to express in the writing of guidebooks.

Indeed, much of the commercial, economic and social knowledge was often acquired through practice, trial and error, or by imitating family members and trying to improve the knowledge of these methods in order to meet the requirements of the times. However, the emptied young people for formal education and routines work has become an obstacle to such practices, which are full of implicit knowledge. (King Abdulaziz University, 2011, p. 117)

The researcher finds that the young people's formal education or even the rush to the work routines are not the two reasons to undermine the implicit knowledge or benefit of it. However, both can be engines to activate implicit knowledge somehow, as will be illustrated in the case studies of this thesis. The basic reason for the researcher and the logic of Ibn Khaldun in line with the works of our time and specifically for Islamic and Arab countries is:

First, there is a weakness in creative education within the strategies of the knowledge of educational institutions. Moreover, there is a weakness in the administrative approach within the productive and service institutions in activating implicit knowledge and harnessing them in finding innovative outputs. These factors seem to have been caused by the limitations of local industries, products and their development. The lack of exploitation of natural resources by competitive intellectual and productive strategies, making developed countries into role models in education and industry without considering the cultural and social differences between them, and many Arab and Islamic countries, which are dependent on grants and

assistance from rich countries. Thus In line with the tendencies of donor countries and not what is required by the reality of the development situation, all these dilemmas and others weaken the rotation of the wheel of creative thought, innovation and design, and also undermine the activation of the potential of the self were those countries, including countries rich in natural , human or cultural resources.

This reasoning can be found through the thought of economists Justin Yifu Lin¹¹⁵ and Célestin Monga in their book *Beating the Odds: Jump-Starting Developing Countries*, where they show that:

One of the most powerful ideas in economics is that no matter how bad a situation a country is in at any time, it always has a comparative advantage in some sectors or industries. It is therefore critical for policy makers in developing countries to start their transformation strategies by making the most of the existing economic conditions—instead of trying desperately to replicate and mimic the economic and financial institutions of high-income economies, even when they are not yet needed and cannot be sustained at low levels of development (Monga, 2017, p. 316)

The second reason is that most of the productive and service institutions in the Islamic and Arab countries do not play their role in benefiting from the implicit knowledge, with its importance and successful experiences at the level of Japan as well as the industrialized countries. The authors Ikujiro Nonaka and Hirotaka Takeuchi say in their book *The Knowledge-Creating Company*:

(we) need to get out of the old mode of thinking that knowledge can be acquired, taught, and trained through manuals, books, or lectures. Instead, they need to pay more attention to the less formal and systematic side of knowledge

¹¹⁵ A Chinese professor and economist. Chief Economist and Senior Vice President of the World Bank from 2008 to 2012. Director, Center for New Structural Economics. Dean, Institute of South-South Cooperation and Development. Honorary Dean, National School of Development Peking University.

and start focusing on highly subjective insights, intuitions, and hunches that are gained through the use of metaphors, pictures, or experiences. (Takeuchi, 1995)

From the above, there is a correlation between crafts, industry, trade, education, and between culture as catalysts for activating societies towards sustainability and innovation. This link would not have been for the implicit cognitive values inherent in all *aş-şanā'i'* on the one hand. And the explicit knowledge values that circulating within all directions of culture from the other hand. Therefore, many of the global competitiveness indicators measure the strength of peoples' competitive culture based on the development of creativity, innovation, design and sustainability. It is therefore important to activate the implicit knowledge of the fact that they play a large role in the growth of general professional skills and specialized craftsmanship. Note that the position of craftsman in strong cultures is no less than that of a university graduate. (King Abdulaziz University, 2011, p. 119)

aş-şanā'i' (crafts, products) is cognitive generators of culture, we must give them sufficient attention in terms of their relationship to people, objects and ideas, explore their historical depths, and connect them to present and future scenarios. Therefore, we must not deal with the industry only as a source of livelihood, but of very important cultural inputs for development. Therefore, we can say that peoples and societies can learn their works from their cultures, and learn their cultures from their works, which makes them a third source to activate Culture-Based Innovation.

4.4.1.4. *al-'ilm*¹¹⁶ (knowledge)

Ibn Khaldun's philosophy of *al-'ilm* shows us that it is important for renewed knowledge to feed the culture, so as to motivate its societies towards sustainable giving in all fields in line with progress and development. In

¹¹⁶ "al-'ilm" is an Arabic Quranic word, with a deep interpretation meaning around science, knowledge and thinking. Islam is the religion of science, knowledge and thinking: The first aayah of the Qur'aan to be revealed enjoined reading which is the key to knowledge. Allaah says (interpretation of the meaning) : "Read! In the Name of your Lord Who has created (all that exists). He has created man from a clot (a piece of thick coagulated blood). Read! And your Lord is the Most Generous. Who has taught (the writing) by the pen. He has taught man that which he knew not" [al-'Alaq 96:1-5].

order to reach renewed knowledge, thought must be stimulated to evolve from a simple level based on perception to a more complex level dependent on apperception. To stimulate thought on evolution, we need a converging knowledge methodology that combines the explicit knowledge and the implicit knowledge inherent in the depth of trades and experiences as we have already explained.

As for perception (*tasawwur*) and apperception (*tasdiq*) we find that Ibn Khaldun six hundred years ago wrote in his book *Al-Muqaddimah* that the Knowledge is either a *tasawwur* or *tasdiq*; F. Rosenthal translated these two Arabic terminologies as a *perception* and *apperception* respectively.

However, regarding Ibn Khaldūn, the basic meaning of perception is "the sensibilia that is perceived by the five senses" and is "not accompanied by judgment." In contrast, apperception is "the judgment that a thing is so" and the "ability to think that may try to obtain the desired (information) by combining the universals with each other, with the result that the mind obtains a universal picture that conforms to external details."

Leibniz defined apperception as a "consciousness, or the reflective knowledge of the internal state." He added a significant observation that apperception is "something not given to all souls, nor at all times to a given soul." Kant, on the other hand, defined apperception as a representation or apprehension as one's own; one might characterize it as the self-ascription or self-attribution of a mental state. However, online dictionaries also have other various definitions; e.g., Merriam-Webster Dictionary defines apperception as "the process of understanding something perceived in terms of previous experience" and perception is "the way that we notice or understand something using one of our senses," which is similar to the Ibn Khaldūn definition.

As for the implicit knowledge, it is the driving dynamics of perception and apprehension within Ibn Khaldun's philosophy of science, so we find it directly and indirectly from the components of the four axes that we have reviewed above. For example, the first axis of thinking, we find that simple thought requires no more than explicit knowledge, and the deeper the

thought, the more complex it becomes, the implicit knowledge becomes an indispensable way in the formation of science and innovation. Also, in the second axis of science, the formation of science begins with the perception of "perceiving things naively"¹¹⁷. Through the apparent knowledge of what science wears to be gradual, professional and knowledgeable, knowledge needs to be ratified, which is "knowledge that includes judgment"¹¹⁸, which requires implicit knowledge. As for the third axis of learning, it reflects the relationship between the teacher and the student where the educational relationship starts with the perception and the simple explicit knowledge, so that the level of communication reaches complex mutual perceptions and concepts that can only be understood by those involved in the same science. The fourth axis of intellectual mastery, the formation of science and the quality of learning, must be an implicit knowledge.

We can see that Ibn Khaldun's crafts and science are mutually supportive each other, both cultural products of the components of civilizations in the past and in the future. Therefore, we should not deal with crafts and science in the context of culture as a reading, writing and conservation, it is a perception and apperception on the one hand, and tacit and explicit knowledge on the other hand. Therefore, without that we cannot benefit from the accumulations of civilization, culture and heritage, where all of them need a sophisticated intellectual. Therefore, we can say that the peoples and societies can ascertain the level of their knowledge and education from their culture, and can ascertain their the level of their culture productive from their interest in knowledge and products, which making al-'ilm a fourth source for the activation of Culture-Based Innovation.

4.4.1.5. al-ḥaḍara (The Sedentary Culture)

Al-ḥaḍara and al-'umrān from Arabic terminologies that must be preserved. Wisely, sometimes, need to use cultural terminologies as it is without convert them to other languages. Abdullah al-Owaisi says that Ibn Khaldun

¹¹⁷ By imprudent cognition, we mean the rule-free cognition, in the sense that it is neither positive nor negative (proof or negation), and is not accompanied by obedience or certainty.

¹¹⁸ A realization that includes proof or negation, plus acquiescence and certainty in proving something or proving something to something. And the judgment to match the ratio to reality or non-conformity.

is more than one who contributed to the development of the word al-ḥaḍāra in the history of Arab culture (Owaisi, 2012, p. 379), a history that extends to pre-Islam. It is also a term closely linked to al-'umrān, which some intellectuals consider to be today's culture or the ultimate cultural development of society and social progress (Owaisi, 2012, p. 379)

To delve into these two terms of Ibn Khaldun can be described as a continual exercise, as they are the endless constructive philosophy when it comes to visions and ideas of multiple disciplines. We cannot put a single balance to express al-ḥaḍāra, moreover the world of religion, history, assembly, engineering and design will certainly have common points about understanding the term "Khaldooni" but will certainly have their different imaginations and ideas about the applications of this term. This confirms the proposition that the term "al-ḥaḍāra" is translated into "civilization" and from that translated into "culture" and translated into "sedentary culture".

However, the researcher is convinced from the point of view of design and innovation that the term "al-ḥaḍāra" cannot be construed in final definitions or literal translations that correspond to non-Arabic terms. Therefore, I repeat that the scientific arena in the field of Arabic language still suffers from a severe shortage of specialized engineering and design studies. What Ibn Khaldun means of his philosophy of "al-ḥaḍāra" and "al-'umrān" because they have a great relationship with art and design on the one hand, and planning on the other hand, in addition to their relationship with many other sciences. In order to understand "al-ḥaḍāra" from the point of view of design and innovation - I have previously stated that - we have to understand them as a diverse business methodology rather than as specific definitions and literal translations.

In other words, we think that the use of the term "sedentary culture" is one of the good attempts in which the translator did not use Ibn Khaldun's handbook in translation but tried to convey something of the concept of the term. It has been mentioned that Ibn Khaldun entered the word "al-ḥaḍāra" to describe them such as: (the persistence of civilization) and (the entrenchment of civilization) and (the end of civilization) This means that "al-

ḥaḍara" can be used as a measure of the level of a cultural product that feeds civilization. Civilization consists of two inseparable parts. The first part is an explicit global vision that can be a collection of religion and diverse cultural systems. The second part is a cohesive political, military and economic system that usually forms as an empire or a historical system. Violin civilization is just an article, while culture is essentially mental and moral. (Mazlish, 2004, pp. 17, 21) If culture feeds civilization and thus this nutrition can range from a product within the basic civilization is the positive and the civilization of Ibn Khaldun, which is within the mechanisms of urban and cannot be separated from it. Or within the civilization of perfection and the needs of civilized perfection within the mechanisms of urbanization without which the basic needs of civilization are not affected, or within the negative culture that is caused by the deterioration of the state as it approaches evil and gradually declines from good.

We can use Ibn al-Khaldun's "al-ḥaḍara" as tools that analyze and measure the level of existing or proposed cultural products as basic, quantitative or negative products, making them the fifth source of information gathering that helps to activate Culture-Based Innovation.

4.4.1.6. al-'umrān (The Civilization)

In 1991, Henry Sanoff pointed out in his book VISUAL RESEARCH METHODS IN DESIGN that most of the architectural and urban education style (KAN) focuses on the physical dimension of the built environment without focusing on the most abstract moral dimension. In other words, there is a missing link between what is material and what is moral. This episode is the psychological feelings of people, their social relations and their mutual culture within their physical environment. Undoubtedly, this issue was one of the most important areas of scientific studies in the sixties of the last century where it was began and developed by Kevin A. Lynch, where he focused on the studies of the visual environment (the perceptual form of urban environments), he was able to conduct many scientific types of research and field studies and wrote specialized books, and all these outputs are one of the most important references to architecture and architecture of the environment and urban science to date.

As a result of the late architect Zaha Hadid, the success of all these projects would have been impossible without the connection between the material and the moral, between the building and the human being and the surrounding environment. The connection between material and moral in urbanization is very complex. It needs to be intertwined in all disciplines because of the psychological and social changes resulting from random actions, because being transformed from a favorable environment to an unfamiliar new environment has a much deeper impact that the need to reorganize the building. Therefore, we sometimes lose the ability to direct ourselves, which requires giving more time and asking ourselves where we are going. Especially in terms of identifying the places and things that surround us because their unique characteristics, which were homogeneous over time, in modern times we need to adjust the aspects of identity, orientation, meaning, and territory between the designers in general and especially the architects who form the natural environment structure to form "places" and Sociologists who focus on the characteristics of people living in those "possibilities" that are to be formed.

I have no doubt that Ibn Khaldun when he discussed "al-'umrān" six hundred years ago had the physical and moral sensations of Sanoff, Lynch and others, but he had something beyond that. Ibn Khaldun had a complete perception that he could be from the events of history and observations of reality in his time, towards the strength or weakness of formations of "al-'umrān" through the methods of decision-making and the quality of the treatments that man would exchange with his environment in all its natural and industrial components. This particular framework can be placed in a modern format called urban branding or city branding where developed countries are trying to scientifically and industrially find the best environment in which to live, says Keith Dinnie on this subject:

Branding a city is more complex than branding a product or service. The stakeholders and target groups are broader – including citizens, tourists, and public and private sector organization decision-makers – and each is looking for different benefits. (Dinnie, 2011, pp. Location: 1,118)

Dinnie adds that

"Effective city branding requires a clear vision for the future of the place and a coherent strategy for brand development, as well as effective policy implementation and the communication of progress, for external and internal audiences" (Dinnie, 2011, pp. Location: 1,563)

Branding is not going to be at best if we do not do new types of innovations and designs, which we referred to at the beginning of the message as a fundamental requirement for the future of societies, advocated by scientists with their vast experience in innovation and design. In fact, the demand for new kinds of innovations and designs will be of the utmost importance to countries that want to stay or rise to be part of the peoples and governments of global competition at political, scientific and economical levels, because most of the world's societies have become urban environments that almost inhabit cities. Studies show that 60 years ago, 3 out of 10 people lived within urban environments. But by 2050 this number will have frighteningly increased to nearly 7 people out of 10 being urban dwellers. (TED Books, 2013, p. Location: 15)

One may ask what the problem is with this statistic, the problem is that this large increase in the expansion of urban cities will cause many problems, but not those traditional problems of population density, transportation, food, etc., though these remain important problems, but there will be additional and more serious problems as studies show that buildings in the world today are the main cause of nearly 40 percent of global carbon dioxide emissions, which is greater than carbon transport emissions (Armstrong, 2012, p. Location: 79). The construction of houses and cities today is mostly passive materials that negatively affect the environment, in other words most of the buildings we live in today cannot return anything of value to the environment in which we live. (Armstrong, 2012, p. Location: 135)

From this point of view we understand why activating ideas such as Ibn Khaldun in religion, history, art, science, "al-hadara" and "al-'umrān" is

important in finding new innovations and designs? It is a practical realization of what he said that the past is connected to the present as a drop of water after another. This is consistent with the spirit of design and innovation that we have already made clear that they always need creative thought and talented minds. But where is this thought and where are these minds? It is noted that the pattern of the modern-day global economy and education did not groom its intellectuals and talented to be intelligent explorers and remarkable observers within the rhythm of their lives and the daily lives of their societies based on their religions and cultures. Here comes the role of the city itself to be involved in the activation of talent, skills and innovation, says Kenzo Tange.

To be a center of culture and information, the quality in the design of the city and its architecture is important
(Bakhotmah, 1998)

Fran Tonkiss adds

"city design is a matter not only of iconic architecture, flagship projects or ambitious masterplans, but also of formal and informal practices that shape urban environments, produce and address urban problems, organize people as well as ordering space." (Tonkiss, 2014, p. 1)

Linking cultural outputs to the urban visions of governance through which the level of cultural and civilizational society draws its attention. We have already pointed to fifteen points related to the orientations of urban thought at Ibn Khaldun, all of which affect and are influenced by all the above-mentioned factors, such as religion, history, art, science and civilization. This makes urbanization the sixth source of information gathering that helps activate Culture-Based Innovation.

4.4.2. Culture Cognitive criteria

This is the second level of the three criteria, these criteria were reached by the philosophy of the thinker, Paul Schafer. For the researcher, they are the most important catalysts through which to absorb the components of cultural knowledge reached through the first level, to be the beginning of a breakthrough

towards finding mechanisms for the development of innovation-based culture, these standards are:

4.4.2.1. A Holistic Definition of Culture

This definition is abstract and inclusive and based on human abilities to activate culture. (Schafer) believes that the abstraction and comprehensiveness of culture can only be understood through the concept, which is of paramount importance before going into the details and issues through history and definitions, where he says "culture must be dealt with as a concept before it can be deal with in other ways. "This aids in understanding the complexities of culture and discussions around them in line with past experiences and the needs of the present and future directions. And the most important (Concept) of culture (Schafer) is to be a comprehensive system that promotes all issues of people's personal, social, national and global needs. From this point of view we find that the abovementioned definition of culture includes the concept of (organic), which gives it the power of originality and identity, the concept of (dynamic) on the other hand gives it the momentum to grow and change. So through these two engines (Schafer) sees culture as life and beauty. Culture in the holistic sense as a "dynamic and organic whole" or "total way of life" (Schafer, 2015, p. 147) he sees it as a giving tree. "Just as every tree is a dynamic and organic whole composed of many interconnected parts, so too is culture" (Schafer, 2008, p. 164). He also sees it as development and innovation "cultures as dynamic and organic wholes that are relevant to the development and functioning of the world system" (Schafer, 2008, p. 210)

4.4.2.2. Four Approaches to Culture

Activate the four approaches to be knowledge platforms for culture-based innovation. To do this positively, the researcher will assume a methodological approach that manages each platform so that the outputs of all the platforms are innovations based on culture. In other words, each platform has its own intellectual input and has its own innovative output that differs from the other platform. This philosophy is the result of two factors: Firstly, the importance of transforming the concept of culture from a theoretical philosophy to the philosophy of productivity, where we have

already noted that the huge stock of cultures needs to be seen and designed with the mentality of the innovative thinker and not only the mentality of the philosopher. Secondly, we have also made it clear that innovation and design are not just for creating a product but also for creating systems, services and business models. Therefore, it was important for this research to be adopted on case studies of realistic projects that are explored and the development of their values and evaluation of their outputs critiqued objectively.

For example, the success of activating the institutional approach platform in innovation and design depends on the opinion of the researcher on the art of leadership, and the applied approach depends on the art of community discovery and the theoretical approach depends on the art of activating cultural information and knowledge in an enthusiastic form encouraging reflection and innovation. The researcher assumes that the conceptual approach to culture is compatible with the exploration of the future from its multiple angles, which are based on philosophical artistic visions that depend on the mobility of societies and the reality of influences, such as positive and negative global trends, rather than the precise scientific and predictive calculations that might shape optimistic future goals and then have disappointing results.

The researcher assumes that the best methodology in dealing with the philosophical artistic visions of the future of innovation and design and their importance is the art of the scenario, and that innovation and design in Saudi Arabia is still without hope and does not keep pace with the richest oil countries in the world, nor with the competencies, which make up a large proportion of its youth among the population of up to 30 million. The researcher found these approaches to culture as appropriate ideas to support innovation and design in Saudi Arabia as will later be elaborated.

4.4.2.3. Culture as a Development Model

In order for Shafer's model to promote development, we need to know two main axes:

A. The first axis: Culture as a Knowledge Discipline

Schafer gives a creative explanation of how culture benefits from disciplines and fields of knowledge, to serve as an authentic disciplined approach based on creative thinking in its design and scientific cooperation in its implementation.

"From cosmology, philosophy and theology, there is insight into worldviews, holism, and the relationship between the parts and the whole. From anthropology, there is insight into the formation of cultures as wholes, as well as into cultural patterns and themes. From sociology, there is insight into values, value systems, symbols, beliefs, identity, race, class, ethnicity and gender, as well as into the bonds and tools of communication needed to bind cultures together. From ecology, there is insight into the interactive process that is constantly going on between the human species and other species, as well as the entire domain of nature. From biology, there is insight into the nature of organic processes, as well as into the evolutionary character of cultural life and the cultures of other species. From history, there is insight into the organization and evolution of culture over time, as well as into the rise and decline of different cultures and civilizations. From geography, there is insight into the organization and evolution of culture in space, as well as into the nature of human settlements. And from the arts, there is insight into creativity, excellence, the pursuit of beauty and truth and the search for the sublime."

In this methodological way of culture, we will have a system that can prove to be able to provide multidisciplinary relevance to achieve in many areas and to develop effective solutions to the most complex human problems, in particular prove that there is a common denominator that combines culture in many directions expressed by important terms such as: economic culture, social culture, political culture, corporate culture, material culture, spiritual culture and environmental culture.

B. The second axis: Culture as a Motivational Character

In order to view culture as a comprehensive cognitive and practical approach in our lives, we must use it through its important properties, which Paul summarized in nine properties: holism, context, value, identity, conflict, criticism, vision, creativity and power.

4.4.3. Culture Interactive Criteria (Synthesis of Culture)

This is the third level of the three criteria. These criteria are derived from the philosophy of the scholar Malik bin Nabi. In the opinion of the researcher, he sets out a plan of achievement to attain the mechanisms of development or innovation achieved through the first or second level. These criteria are:

4.4.3.1. ālam al-Ashyā' (Realm of Things)

The realm of things according to Malik bin Nabi is the first thing that man recognizes when he comes to the world, the infant is nothing more than a thing, then he begins to recognize his mother and his surroundings (in the realm of people), then moves to abstraction, analysis and synthesis in a world Ideas). (Muhammad Adnan Salem) Malik bin Nabi believes that when society is in a state of upheaval, harmony and balance must be achieved between these three worlds. However, before the urbanization is poor in the realm of things, the post-urban society is full of things but free of life. Malik bin Nabi sees that focusing on the "realm of things" without activating the "realm of people" and "the realm of ideas" restricts the vitality of culture and makes it specific within semi-complete and repetitive definitions. Malik bin Nabi believes that Western or Marxist thinking is based on the "realm of things" that revolves around their ideas, which cannot be applied in the Arab and Islamic countries, because they still need to form their own realm of ideas, and have a long way to breakthrough towards the Western thinking "realm of things".

4.4.3.2. ālam al-Ashkhaṣ (Realm of Persons)

Malik bin Nabi considers that the crisis of the Islamic world for a long time was not a crisis in the possibilities and resources, but in the ideas and subordination of States and individuals. Therefore, he has always urged that the Islamic and Arab world recognize this fact clearly, and that if it is not

realized, it will continue to be a crippling disease and the reason for the Islamic and Arab world's backwardness in the developed world. In order for the Muslim and Arab world to overcome this crisis, it must explore the path of the right nation for it. First, to find inspiration in the Arab and Islamic countries, to teach future generations how to discover ways that lead the processions of humanity in all its fields, not only teaching them the science and trends of ancient knowledge and how to keep up with capitalism or socialism in their methods and their follow-up. The second thing is that Islam does not need to confuse the words of some Muslims, this is an imported cultural distortion, indicating a deficiency complex in those who do so. Islam must also teach its followers not to care about the campaigns of distortion and that abuse will not diminish the strength of something. Islam is a march of religion and the reconstruction of the land of sustainability, it will not give up and will not end! It is a project of life full of clear-cut elements that open the door to those who deal with it with thought, understanding and responsibility. (Owaisi, 2012, p. 540)

4.4.3.3. 'ālam al-Afkār (Realm of think)

In this regard Malik bin Nabi is unique in providing a very important human and social scale. He points out that as far as backward societies live with their ideas and people to the level of civilization, this will raise the conscience of developed societies to an advanced level of human ideas ... The backward man brings ideas that will give a civilized man a better idea of the human world. " Thus, the philosophical, realist and idealistic ideas of Malik bin Nabi are of paramount importance because they define people's views of the world with their horizons and souls as well with their sensory, visual, material and rational qualities, meaning in this view, the world is no more than a world of material things, and yet to another group sees the world through everything that is spiritual, metaphysical, moral, mystical and abstract, meaning that to this group, the world is no more than a world of ideal ideas. Is this group closer to idealism than reality or vice versa, and he who is idealistic yet sees himself as more realistic, all of which is looking at the reality of the world, but the human theory assumed by Malik bin Nabi cannot be realized. Ideally, they complement each other on the basis of

repetition between quantity and quality, between spirit and matter, between the end and the reason, this tie wherever misfired by one side or another upsets the balance of society in his thoughts and discouraging actions towards progress and humanitarian production equal among all the land communities. (Mahfouz, 2007)

Of the intellectual data praised by Malik bin Nabi the term culture itself, is one of the geniuses of humanity, it was the fruits of the Renaissance, which was initially the metaphor for agriculture and harvesting, and then developed its term to become one of the most important sciences with ramifications in all areas. Malik bin Nabi also praises the Arab intellectual who was able to derive the word (Al-thaqafa) from the Arabic language to be synonymous with the term (culture) and wishes to do a study to know the owner of this Arab derivation and what the reasons are for his choice? The Arab division, as Malik bin Nabi points out, did not exist according to his knowledge in the writings of the Islamic Golden Age as a social, scientific or political phenomenon ... as is the case in Ibn Khaldun's introduction, where it was found as a plain text rather than a term, hadhara), which has been widely used as a social, scientific and political phenomenon. This is equivalent to the term "civilization" in English.

Therefore, Malek bin Nabi sees that the term (Al-thaqafa) did not develop in the Arab embrace as the development and the spread of the term (culture) did in the Western embrace, particularly European, to become a term of great importance. In other words, Al-thaqafa did not acquire the power of identification in Arabic, as is the case with the word culture in its mother tongue. For example, the term "culture" became a brilliant intellectual state in the field of singing, philosophy, science and law. There have been numerous terms throughout the ages and yet still today the term (culture) enjoys continuous interaction as a meaning and concept to include all aspects of life in all its scientific and practical details.

In this important chapter of the thesis, the philosophy of three distinguished scholars was reviewed in their intellectual outputs on culture. They are not only intellectuals who are interested in the issues of civilization and culture, and their multiple

interactions of religion, history, science, and work. They are also inspiring scientists for innovators, creators, and designers who wish to use culture as a sustainable source of creativity, innovation, and design. It is not an exaggeration to say that all these scientists are full of cognitive creativity, logical imagination, and practical motivation towards the formation of a philosophy that combines the experiences of the past with the possibilities of the present and future abilities. The researcher sees that these three thinkers, who were studied, were motivated to think outside the box with regard to a deep understanding of culture and heritage and to activate them as mechanisms for development and growth. In the following, there are three levels that have been derived from the philosophy of these thinkers, as they are presented in a model called Culture Apperception Criteria (CAC). This model consists of twelve pillars divided into three groups.

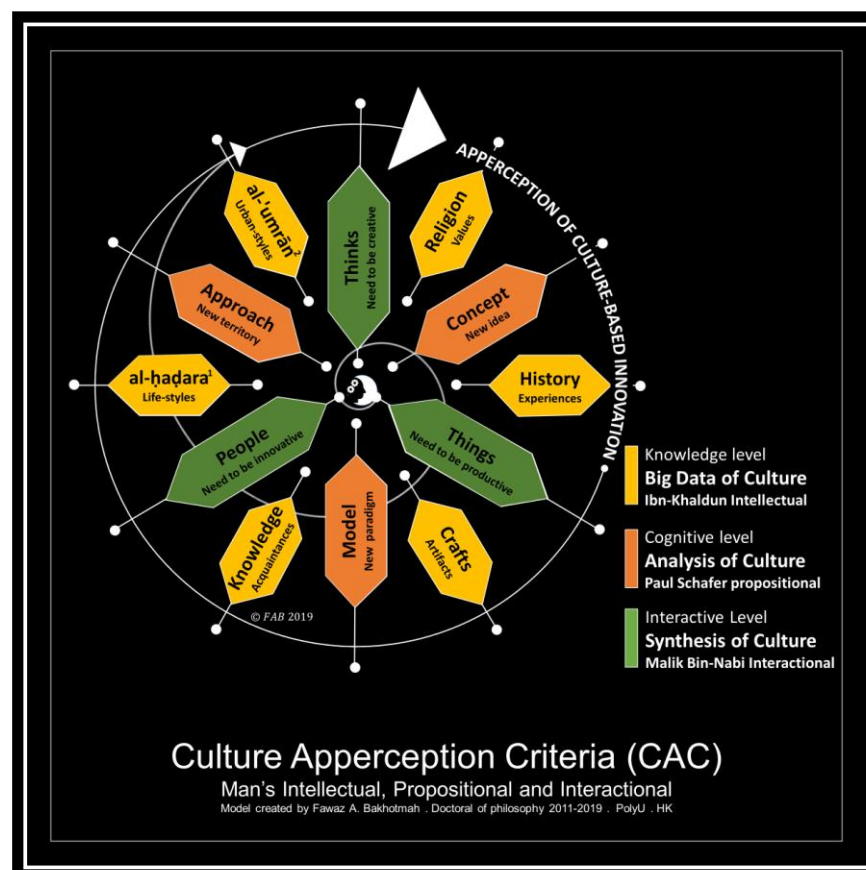


Figure 4.6 Culture Apperception Criteria (CAC) is a complete cycle model consisting of twelve pillars divided into three groups that have been derived from the philosophy of three thinkers. Model concept: Fawaz A. Bakhotmah..

The first group contains six pillars to reach creative cultural knowledge from specific topics to a general conclusion (inductive reasoning), these subjects are: 1) knowledge

of religion and values, 2) knowledge of history and experiences, 3) knowledge of products and services, 4) knowledge of science and education, 5) knowledge of architecture and urbanity, 6) knowing of the civilization of cultural accumulation of past and present.

The second group contains three cognitive pillars to understanding the inspired data within the creative cultural knowledge, these cognitive topics are: 7) Defining the general concept of the cultural knowledge on which the information was collected. 8) Deciding the general concept of the most appropriate cultural approaches. 9) Building the cultural or heritage model as a product, a theory, an experience or benefit that can be used developmentally. However, these three cognitive pillars could be used as deductive reasoning for some cultural facts.

The third group contains three pillars that stimulate a shift from the theorizing of creative cultural knowledge to a productive application by: 10) an approach that gives "the thing" the greatest interest, 11) an approach that gives "thinking" the greatest interest, or 12) an approach that gives "people" the greatest attention. Here the successful productive application is a kind of abductive reasoning that begins with a hypothesis question, which might need inductive or deductive reasoning by using (things) or (thinking) or (people) to approve or disapprove the hypothesis suggested.

It is important to note that these twelve pillars do not segregate from each other, so they can be used through the three suggested levels or overlapping to reach a certain intellectual or innovative outcome, for example: we can say that the historical Silk Road was a kind of global social innovation? This inquiry is expressing an abductive issue, we can discuss this issue through inductive or deductive reasoning. By inductive reasoning, we can notice that because of the silk road: peoples' values were shared, nice historical stories were documented, different sciences were deliberated, many crafts were flourished, urban areas were expanded, and the civilization of nations were interacted. All these activities give a sign that the historical Silk Road was a kind of global social innovation.

By deductive reasoning, we can agree that the significant commodity at that time through Silk Road was, silk. Silk was not just a trade, but it generated many communities based on sericulture and silk textiles skills, thus, providing proof that the historical Silk Road was a global social innovation.

Chapter Five

Augmentation of Culture

5.1. Culture Components

5.1.1. culture system

5.1.2. culture pattern

5.1.3. culture element

5.1.4. culture trait

5.2. Culture Approaches

5.2.1. Institutional cultural approach

5.2.2. Practical cultural approach

5.2.3. Theoretical cultural approach

5.2.4. Conceptual cultural approach

5.3. Culture explicit and tacit knowledge

5.4. The Hypothesis

5.4.1. Hypothesis 1, institutional cultural approach motivates culture systems

5.4.2. Hypothesis 2, practical cultural approach highlights culture patterns

5.4.3. Hypothesis 3, theoretical cultural approach revives culture elements

5.4.4. Hypothesis 4, conceptual cultural approach contemplates culture components

5.5. Culture Augmented Net (CAN)

Augmentation of culture is an imaginary knowledge net to enhance the cultural perception and apperception, to magnify our thinking to find a productive solution based on culture and heritage through CPC and CAC models. This integration between the two models is called the augmented culture. This methodology enables us to analyze the input of cultural and heritage concepts and then reformulate and synthesize them within new cultural identity outputs that consider the age of knowledge and technological progress.

5.1. Culture Components

The importance of this topic lies in the fact that the components of culture are accurately defined in both perception and apperception through which analysis or synthesis is conducted to reach a deep understanding that establishes multiple ideas about culture-based innovation. On the other hand, the identification of these components will allow those interested to answer cultural questions that stimulate innovation in accordance with the times, including but not limited to: Where is this innovation of culture today? Why is this cultural innovation important? How does innovation begin? What is the relationship between this cultural innovation and other cultural components?

Many scholars agreed that culture consists of four basic components: First, "culture trait" are the simplest functional units into which culture is divided when we want to analyze them, and they cannot be simplified for smaller units. Second, "culture elements" consist of a number of "culture trait ", used in the analysis of composite units contained in culture. Third, the "culture pattern" is the link between a set of cultural elements and a link between them. It is a method of behavior, which is part of a particular culture. The "culture pattern" is characterized as a specific and coherent construction that plays a functional role, acquires historical value, and achieves a continued existence. Fourth, the "culture system" is the interaction between the components of a single culture of patterns, elements and cultural features. These patterns, elements, and attributes are intertwined within social systems, including religious, economic, moral, political, linguistic, customs, traditions, etc. For the importance of these four components, we mention some of the most important functions:



Figure 5.1 Culture Components are accurately defined in both perception and apperception through which analysis or synthesis is conducted to reach a deep understanding that establishes multiple ideas about culture-based innovation. concept: Fawaz A. Bakhotmah..

5.1.1. Culture system

Each culture consists of social, economic, religious, moral, political, linguistic, customs, traditions, etc. The cultural system is a theoretical model of a culture composed of interconnected parts of these systems. Specialists in different fields often use this term to express the interrelationship of culture. In other words, this term deals with the analysis of the interdependence between the parts of the cultural structure with its constituent systems. This term in this study has nothing to do with the scientific and philosophical details that the historical schools of anthropology tend to view as a culture of unconnected cultural elements that have independently evolved. In order to complete knowledge about this term, three other terms must be addressed: culture pattern, culture elements and culture practices.

5.1.2. Culture pattern

Culture systems consist of many culture patterns where those interested in culture suggest that the best way to define culture patterns is that they are "a generalized way of behavior that relates to society rather than to the individual,". They are "the links between cultural elements that are supposed to form a specific and coherent structure that plays a functional role. They gained

historical value, and achieved continuity in existence.” It is important to know that not all cultural styles are of one type, but of two types: First, ideal behavioral patterns are ideal cultural patterns, such as all that a particular society must do or say in certain situations if it is to fully comply with the standards of conduct defined by its culture. Second, real behavioral patterns are to monitor what people actually do in certain situations. For example, clothing as a cultural system, we find that it contains a number of styles (men's clothing, women's clothing, army clothing, workers' clothing, etc.). Each cultural pattern contains a number of cultural elements: headgear, shirt, trousers, gowns, shoes, etc. ... Each cultural component contains a number of features: "Shirt with or without collar, short sleeves, Etc. These features may not be subdivided into smaller sections, and are present with other features of the cultural component (composite attributes). It should be noted that patterns often overlap with elements and attributes, depending on the complexity or simplicity of culture.

5.1.3. Culture elements

Culture patterns consist of many culture elements - a qualitative term used in culture analysis to determine the simple or composite units included in a particular cultural pattern. The cultural component consists of a number of cultural features, as we will later review. The cultural component contains four aspects: form, use, function and meaning:

First, Form: The cultural component is determined from the manifestations of form and dimensions, drafting methods and all other factors contributing to its apparent or tangible existence. Physical or moral forms of cultural elements are easily identifiable and transferred from one culture to another. This is contrary to cultural features, as we will see.

Second, Use: The use of the cultural element is determined by a particular people or community. For example, the axe can be used to cut down trees, for combat or for ritual purposes. Thus, the use of the axe is not related to the form. Cultural elements of similar forms can therefore be used in a variety of uses in different cultures.

Third, Function: The function of the cultural component is broader than its use. The status of this element is based on the entire culture. For example, people

living in forests can use an axe in various ways related to agriculture and land clearance in preparation for crop production. However, in another society that does not know such agricultural methods; an axe can be used in a completely different context, for example, in housing construction, boat construction, and other similar construction works. Therefore, we also find no inevitable relationship between function and any use or form. The three aspects are completely independent of one another.

Fourth, Meaning: The meaning of an element consists of the total associations that people in a particular society have placed around a cultural element. Thus, stone axes are of high value in the Amazon forests, for example, where stones are rare. Therefore, it must be maintained with utmost care. On the contrary, this stone axe is not of great importance to people living in an environment containing many stones, where the damaged axe can easily be replaced with another. Therefore, every cultural element in fact has a wide range and not a specific aspect. They contribute to the resilience of cultures and their ability to change and face fragmentation.

5.1.4. Culture traits

We have come to realize that each culture consists of a number of cultural systems. Each system consists of a number of patterns. Each pattern consists of a number of elements. Each element consists of a large number of cultural traits. What are the cultural traits? Cultural traits are cultural units that cannot be analyzed in smaller units and cannot be interpreted separately from other features that constitute the cultural element. Thus, the cultural element itself cannot be interpreted independently of the other elements that constitute the cultural pattern. Cultural patterns that make up the cultural system cannot be interpreted in isolation from other patterns. The same applies to cultural systems that complement one another (cultural integration). Therefore, we find that the cultural characteristic is the simplest functional unit that culture can be divided into when we wish to analyze it. One of the definitions in this regard is that the cultural feature is "the finite component of culture" and also one of "the precise units and traits of behavior and trades that socialize" the smallest units, behavioral features and skills that are socially transferred. "It is also the smallest

recognizable unit in a particular culture.” It is also the most basic unit of culture that the latter can be analyzed.

5.2. Culture Approaches

We have already addressed the culture approaches within the ideas of Paul Schafer, where we pointed out that the importance of these approaches stems from the importance of culture itself, because it is a thought and behaviour in the most accurate details of life and has a different identity from one place to another depending on the components of the four cultures that were discussed in the previous topic. Here we will discuss these four approaches in more detail with some examples:

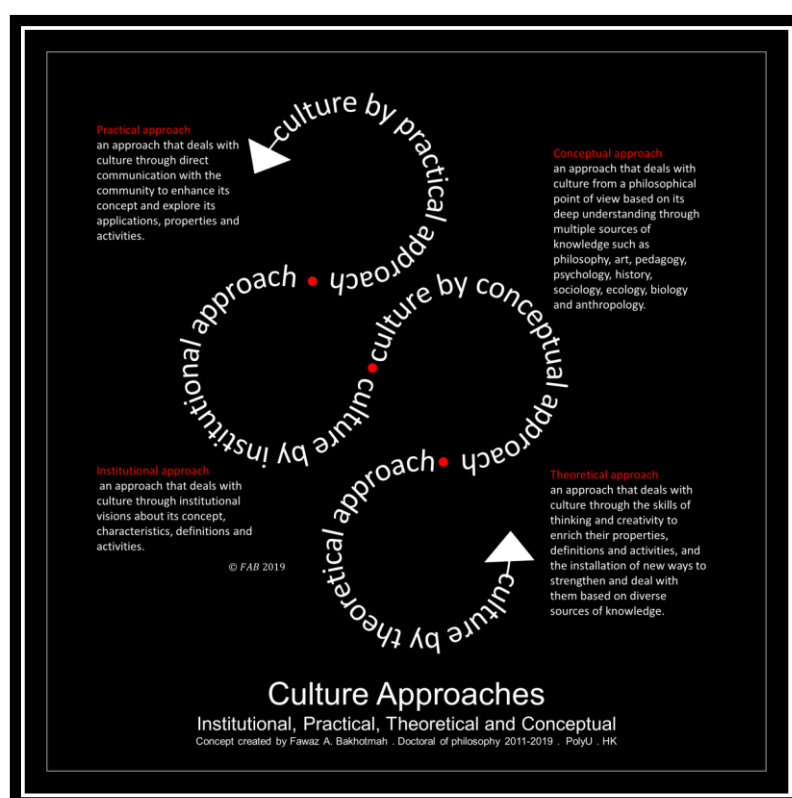


Figure 5.2 Culture approaches; the importance of these approaches stems from the importance of culture itself, because it is a thought and behavior in the most accurate details of life and has a different identity from one place to another depending on the four culture components. concept: Fawaz A. Bakhotmah..

5.2.1. Institutional cultural approach

An institutional approach is an approach that deals with culture through institutional visions about its concept, characteristics, definitions and activities. It is important to distinguish between the visions of institutions based on the promotion of the culture of societies and peoples, which are concerned with governmental institutions and regional and international organizations, and the culture of companies based on innovation in their management and innovation

in their outputs. The institutional approach is the globally dominant approach because it fits in with the orientations of political systems based on international relations and economic globalization. One of the advantages of this approach is the ability to activate the cultural knowledge, arts, heritage and industries ... scientifically and practically, directly or indirectly through the ability of institutions to possess the possibilities, money and media. It is the lack of institutional approach to deal with culture through narrow definitions related to the interests of institutions, and to limit some of the cultural ideas to be within the control of institutions for multiple reasons and justifications, as well as dilute the culture of religious communities or ethnic minorities undesirable to contain within another culture compatible with the interests and ideas of the institution and promote its development objectives. Shafer explains that one of the biggest mistakes is to use the institutional culture approach as a starting point in studying culture as original concepts and patterns. If we want to link this approach to reality, the Hong Kong government can be taken as an example.

Hong Kong has a culture of its own that can be seen in the daily life of its community. It is a vibrant city that still retains great cultural and heritage elements. It is an incredibly advanced city with an easy lifestyle, world-class tourist attractions and modern services. However, it can only be described as Hong Kong. Hong Kong can see its identity in the way of the mobility of people, school children and transportation, but the extension of this identity is revealed in the fashion of young men and women, and the way they interact, address each other, dine and stand waiting for buses. Hong Kong has a special character in handling its streets and designing train stations and bus stops. It is a city that has cleverly dealt with its history, finding it here and there without putting a fence around it. Its history is part of the daily fabric of daily life, education, economy and maritime mobility. Hong Kong has a well-disciplined, localized education system and another educational approach that takes Western culture into account. Hong Kong is not without its cultural celebrations, its ancient parks and sports stadiums are everywhere. What is remarkable is the concern of professional associations with regards to the importance of Hong Kong culture, specifically the Hong Kong Design Society, the Hong Kong Society of Designers and others, all of which have programs concerned with

culture as a product or culture as prizes, as we will see in the study accompanying this research. This simple example may illustrate the importance of the institutional approach in promoting the culture of society within the development goals.

5.2.2. Practical cultural approach

A practical approach is an approach that deals with culture through direct communication with the community to enhance its concept and explore its applications, properties and activities. The practical approach is based on identifying and highlighting the input and output values of the community's realist culture of social communication, business, events, celebrations, works, newspapers, magazines, lectures, seminars, conferences, channels and other related media. The practical approach works in a more direct manner, the more the circulation of culture between the community increased the sources, and the more inputs, the more varied outputs and vice versa also. In this regard, Schafer explains that the term culture here may also be traded in an uncontrolled way, and people are confused by the use of the term in many other areas. One of the advantages of this approach is to know the culture of society from a realistic perspective and through multiple channels, which enables the monitoring of cultural patterns and the knowledge of their positive or negative growth in society. The inadequacy of this approach is that it is not sufficient to document the culture of society in a scientific and academic way. Cultural outputs are dealt with in multiple ways, and the origin of them is difficult to identify. The cultural situation of non-members may also be interpreted on the basis of inaccurate personal impressions. If we want to link this approach to reality, the field study of American author Maris Gillette on Muslims in China can be taken as an example.

A book (between Mecca and Beijing) by the American author (Maris Gillette), a book is discussing the culture of Chinese Muslims with distinct scientific and academic approaches. Where the writer for a period of time lived with the Chinese Muslim community in Xi'an to meet and eat with them and attend their occasions and deepen her knowledge of their values and ethics, and to arrive to the conclusion that the civilization and culture of Chinese Muslims is the product of the Islamic religion, which settled in China more than 1300 years ago

. After a lengthy period of time, Chinese Muslims were not influenced by the division of the Chinese people into ethnic groups aimed at dissolving their religions. The author also states that although Islamic culture is within a non-Muslim community, Muslims around 660 CE managed to maintain their religion, rituals and cultural products despite the difficulties they faced. Chinese Muslims today are part of China's basic economic structure, not only as merchants but as holders of a key cultural product that gives China cultural values, economic and tourism attraction. The researcher believes that this book of cultural studies has valuable knowledge, which was accomplished by a neutral writer. The book documents a significant period from the end of the last century, which is one of the periods of a great cultural transition that has covered China and still continues to do so. The study, on the other hand, gives importance to the Chinese culture and Islamic culture, which is full of creativity, innovation and design outputs that have not yet been actualized due to the sensitivity of the discussion of religions in China.

5.2.3. Theoretical cultural approach

A theoretical approach is an approach that deals with culture through the skills of thinking and creativity to enrich their properties, definitions and activities, and the installation of new ways to strengthen and deal with them based on diverse sources of knowledge. It is therefore an approach that focuses on basic cultural concepts and the search for its abstract and original models. Thus, the theoretical approach is different from the institutional approach or practical approach because it deals with culture as an original concept with its own values, which preserve the personality of society through documenting the past and using it in the present and investing it scientifically and practically in the future. The theoretical approach is the safe approach in which the original physical and moral manifestations of culture can be explored by reference to historical records, reference works, research, scientific journals, documentaries, artifacts and heritage products or through the testimony of trusted persons who faithfully reflect the depth of a society's culture. There are multiple methods of using this approach, including analysis, hypothetical, meditative, extrapolation, reasoning, criticism and problem-solving. The theoretical approach is capable of developing scientific theories and interactive

ideas and also exploring the reality of communities by observation and documentation through practical approaches. One of the advantages of this approach is that it is a safe and reliable source of understanding the origin and content of a culture of society for its intellectual and scientific autonomy, as well as the ability to explore the culture and its heritage through the analysis and synthesis of various physical and moral patterns throughout history. The lack of this approach may be affected by political or racial constraints, or it may not have reliable sources that are dependable, or its culture and heritage may be documented by those who possess cultural and scientific knowledge but do not belong to it. If we want to link this approach to reality, we can take a closer look at the design and manufacture of the first Chinese car as an example.

The first Chinese car, called "Red Flag", was first designed in 1935, and was the first feature of the 2006 edition of the Journal of Designing, a journal by the Hong Kong Polytechnic University's School of Design. The paper documents the miracle of Chinese culture in 1935 in creating an enthusiastic generation of young people who were able to manufacture a real car within thirty days. The paper gives deep lessons in the relationship of culture to innovation, design and industry. The first of these lessons is the strength of Chinese culture in finding a qualitative leap and breaking the typical boredom and insubordination. The second being, the young Chinese proving that their Chinese culture is capable of overcoming their simple technical and financial potential through their determination and enthusiasm towards a common goal. The third, culture eliminates the fear of failure, there is no shame in manufacturing the first car in China, which might be of a lower quality than the car manufactured by other vehicle manufacturers, the disadvantage was to keep the culture of China-centric consumerism. Fourth, the continuous and uninterrupted design and manufacture of the car in thirty days and thereafter convincing the government proves the authenticity and flexibility of Chinese culture, which is able to change and keep pace with global developments. China today has more than 40 car factories that are fully sponsored by the government and the private sector. Without a doubt, more than 80 years after China's first automobile industry, this achievement is an important cultural hurdle to learn from before becoming a

knowledge giver, to enhance the capacity of researchers, innovators, designers and officials.

5.2.4. Conceptual cultural approach

A conceptual approach is an approach that deals with culture from a philosophical point of view based on its deep understanding through multiple sources of knowledge such as philosophy, art, pedagogy, psychology, history, sociology, ecology, biology and anthropology. This approach is not limited to the formation of a philosophical vision on a single culture, but also addresses multiple cultures based on the treatment of overlapping definitions and cultural terms to be within the values and laws and enact the real concepts of the culture of material and moral societies. The conceptual approach in general does not discuss small cultural theses but rather large and complex cultural theses ranging from important questions or complex problems or new orientations that may result from the institutional, practical or theoretical approach, so they must be familiar with the conceptual approach. One of the advantages of the conceptual approach is the formation of accurate and interrelated philosophical cultural information, the conclusion of concepts that define cultural values and norms, and the development of theories and definitions through which the development of a culture can be understood. One of the disadvantages of this approach is the lack of data, information and cultural statistics within the previously mentioned knowledge fields of society. The limited material and moral support for activating this field, is the lack of motivation towards generating creative mechanisms that implement the conceptual approach in the field of development.

If we want to link this approach to reality, the “Cultural Atlas of Islam” can be taken as an example for Ismail¹¹⁹ and Lamya¹²⁰ Al-Faruqi who left a thorough,

¹¹⁹ Isma‘īl Rājī al-Fārūqī (1921 – 1986) was a Palestinian-American philosopher, widely recognised by his peers as an authority on Islam and comparative religion. He was Professor of Religion at Temple University. He was the founder of the International Institute of Islamic Thought. He wrote over 100 articles in addition to 25 books. He also established the Islamic Studies Group of the American Academy of Religion and chaired it for ten years. He served as the vice-president of the Inter-Religious Peace Colloquium, The Muslim-Jewish-Christian Conference and as the president of the American Islamic College in Chicago.

¹²⁰ Lois Lamya al-Faruqi (Lois Ibsen) (1926 - 1986), was an expert on Islamic art and music, and was married to Ismail al-Faruqi. She was co-authored The Cultural Atlas of Islam with her husband, which was published by Macmillan.

in-depth and up-to-date cultural work on the concept of the culture of Islam before were stabbed to death in their home in Wyncote, Pennsylvania on May 27, 1986. (Wikipedia, n.d.) Unfortunately, both worlds (husband and wife) were unable to see their wonderful work, which was later named (The Cultural Atlas of Islam). They wrote one of the best books about culture stemming from the Islamic religion, where it corresponds to the data of the modern era from a philosophical perspective. The authors, though from different cultures - the husband (Arab origin) and the wife (American origin) - harmonized their cultures with the concepts of culture and civilization stemming from the Islamic religion. Both had a great knowledge of the different sciences that we have already talked about in this approach, so they did not talk about the culture generated by the Islamic religion from the standpoint of feelings, but from a rational, empirical and realistic approach that combines the institutional approach with the practical approach and the theoretical approach. The two of them combined possessed a great knowledge of other religions too, such as Christianity and Judaism.

The encyclopedia is undoubtedly organized and the level of its language, ideas and ideals directed to the class philosophers, intellectuals and to those who want to know the culture of Islam as a religion and science, an invention and innovation of the creators, innovators and designers. The two authors succeeded in highlighting the Islamic culture through a neutral and equitable perspective throughout history. This work is a pioneering example of one who wants to discuss the culture of conceptual approach.

5.3. Culture Explicit and Tacit knowledge

It is not possible to deal with the components of culture or with its approaches without identifying the sources of knowledge, both explicit and tacit, and dealing with them dynamically. This dynamic between explicit and tacit knowledge can only be found in dual thinking through perception and apperception. Formal thought may not require more than explicit knowledge, but creative thought and innovative behavior needs tacit knowledge; it is an indispensable way of creating innovations and new sciences as well. For example, the formation of science begins with the perception of "perceiving things naively" through the explicit knowledge of what science brings to gradualism, professionalism, and experience to knowledge

needs apperception, "cognition includes judgment " which requires tacit knowledge. Furthermore, the educational relationship between the teacher and the student begins with the explicit knowledge, which gradually reaches levels of concepts and complexities that can only be understood by those involved in the same science, which is expressed tacit knowledge, because tacit knowledge of this importance must differentiate between explicit and tacit knowledge.



Figure 5.3 Explicit and Tacit Cultural knowledge. Formal thought may not require more than explicit knowledge, but creative thought and innovative behavior need tacit knowledge; it is an indispensable way of creating innovations as well as new sciences. concept: Fawaz A. Bakhotmah..

In their book *The Knowledge-Creating Company*, Ikujiro Nonaka and Hirotaka Takeuchi perceive the explicit knowledge as the knowledge that:

can be articulated informal language including grammatical statements, mathematical expressions, specifications, manuals, and so forth... explicit knowledge can easily be communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles... explicit knowledge can easily be "processed" by a computer, transmitted electronically, or stored in databases. (Takeuchi, 1995)

The tacit knowledge is knowledge that is:

hard to articulate with formal language... It is deeply rooted in an individual's action and experience, as well as in the ideals, values, or emotions he or she embraces... tacit knowledge is difficult to communicate or to share with others. Subjective insights, intuitions, and hunches fall into this category of knowledge. Furthermore, the subjective and intuitive nature of tacit knowledge makes it difficult to process or transmit the acquired knowledge in any systematic or logical manner... the cognitive dimension of tacit knowledge reflects our image of reality (what is) and our vision for the future (what ought to be). (Takeuchi, 1995)

It is clear that the activation of implicit knowledge is not easy but at the same time it is an advanced and renewed knowledge in the advancement of science and innovation. The importance of this is reflected in one of the distinguished works of King Abdulaziz University in Saudi Arabia for the obstacles facing the knowledge economy, which was one of the main reasons for the slow pace of "finding new knowledge in industrial and business establishments." The new knowledge does not come from a vacuum; it is generated as a result of society's needs or the desire to modify or improve conventional knowledge, this confirms the theory of Ibn Khaldun in civilization and urbanization as we have been discussed previously. The University, through its author, has urged industry and production workers to undertake sustainable development while constantly solving the problems they face in order to provide new knowledge. The University also urges knowledge-based institutions to seek innovative intellectual depth and the depth of innovative skills based on new knowledge and new product. It also urges all educational, productive and service institutions to adopt issues that generate multiple questions that require a variety of answers, without which it is difficult to find new knowledge. The university points out that resorting to experts around the world to find answers to everything that stands on the horizon of questions without trying to find answers through civilization and culture of society will lead to weak institutional thinking and an inability to find new knowledge, which emphasizes the importance of culture and heritage of societies in their development.

Therefore, the University did not overlook the author by highlighting the importance of Islamic and Arab culture in activating the role of apperception and tacit knowledge. It is important to review some of the important points in this culture:

1) Islam urges Muslims to commit to work in a group and collective action does not mean the blind leadership of the group or the abolition of individual responsibility, and does not prevent competition between people and acceleration to the welfare of the individual and the welfare of the nation. However, the competition based on the arrogance and appropriations of others or climbing on their shoulders is not recognized by Islam. Taking the importance of this factor into account, both, Muslims and Arabs behaved irresponsibly, which made them susceptible to the influence of Western individualism, though this did not affect their ability to work in a group while maintaining their ambitions and personal aspirations. Many contemporary Islamic countries limit intellectual property to individual ownership, invention or innovation. Knowledge and innovation are often attributed to an individual rather than a group.

2) Islam reinforces the role of intellectual freedom by giving power to the central administration in activating the role of the society and design, the best ways of communication between them and the senior management, which helps to undermine the bureaucracy and stimulate serious interworking between all trades and crafts. But in reality, the situation is quite the opposite. Central administration has no role to play except as dictated by senior management and therefore there are no real initiatives that stimulate the generation of new knowledge.

3) Muslims view the implicit knowledge of human life as reflected in the stories of the prophets and the stories of the previous nations in the Holy Quran. This provides people with the knowledge of their predecessors in the form of tacit knowledge that the previous generations of Muslims were able to convert to the apparent knowledge. Books of heritage, including the introduction of Ibn Khaldun.

4) The creation of a new knowledge supported in Islam by the legitimacy of ijtihad. Therefore, the idea of trial and error is legitimate if the person admits the mistake, if it is announced and corrected.

5) The Muslim, the mastery of his work is to please Allah and the desire to be closer to HIM which is unparalleled in other cultures, resulting in the implicit knowledge, which lies in the depths of the ratification of the Muslim's knowledge and diligence.

6) One of the most important knowledge of the apparent and implicit in Islam is the Islamic ethics. This is because many of these ethics are based on the guidance of the Quran and the Sunnah of the Prophet, to provide an understanding of the implications and ramifications of the community. Ethics cannot limit their behaviors and practices, essentially writing about them, gives implicit knowledge and ratification a larger role to play in understanding and practice.

7) Contemplation and thinking are an Islamic trait that is recommended by Allah in many Quranic verses, which is like ethics, whose benefits and practices cannot be limited.

5.4. The Hypothesis

The researcher proposes four hypotheses to link culture with its culture components, culture approaches, and culture knowledge based on what has been discussed above. These assumptions achieve two things: First, the use of culture as a development data, stimulating creativity, innovation, invention and design. Second, to explore the cultural content, cultural approaches and cultural knowledge that are compatible with the proposed development projects and initiatives:

5.4.1. The first hypothesis, institutional cultural approach motivates culture systems

The quality of outputs determines the efficiency of inputs. If we assume that the output here is the Urban Development of a country, it is obvious that the inputs to this development will be culture, thought and order; based on the fact, that Ibn Khaldun confirms that, good urbanized states help in the activation and dissemination the diversity of culture. From here it can be deduced that the "cultural institutional approach" should coincide with the culture of the community and be mindful of perfection, as this reflects on the quality of urbanization. This means that the State and its institutions will always be keen on the selection of the leaders of the perseverance who are able to go with "apperception" of urbanization and the community and have the

"augmentation" in the interpretation of this awareness based on the variety of ideas and economic diversity and investment, thereby continuing to make the institutions interrelated.

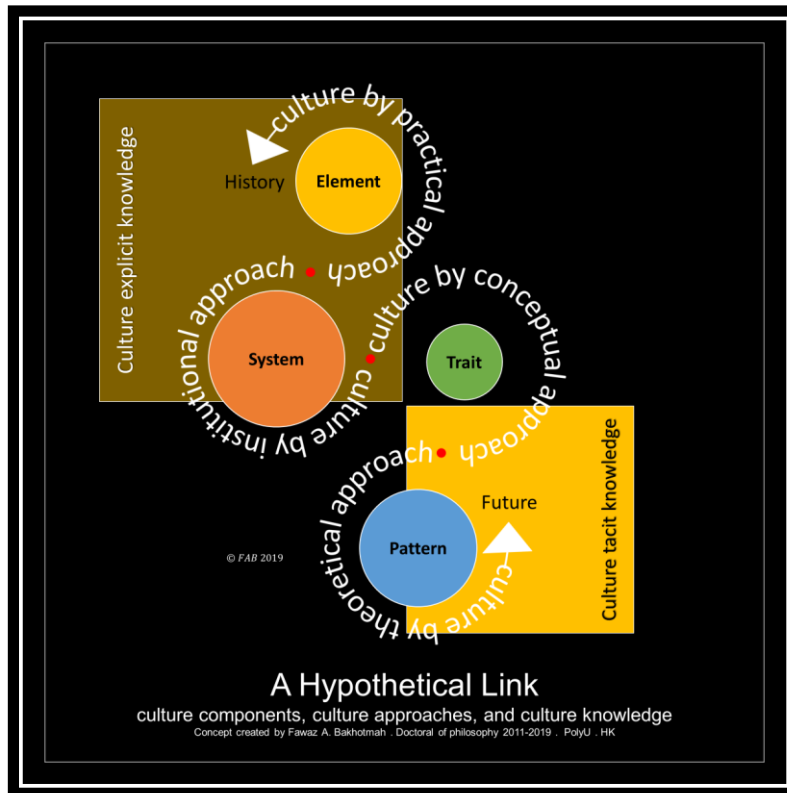


Figure 5.4 The researcher proposes four hypotheses to recognize culture with its components, its approaches, and its cultural knowledge. concept: Fawaz A. Bakhotmah..

5.4.2. The first hypothesis, institutional cultural approach motivates culture systems

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of ideas and economic diversity and investment, thereby continuing to make the institutions interrelated.

Case Study 1, Understanding culture as system through Hong Kong design development

This case study has examined Hong Kong as an independent Chinese state, with a democratic political system, which is what attracts plenty of business to this city. Hong Kong has become an essential Asiatic center for the proficiency of college study and scientific researches, aside from this it is an international tourism destination with plenty of entertainment, and its own traditional and cultural traits. This case study provides a brief comprehensive philosophical idea for the designing and innovation of Hong Kong through a doctoral student's perspective.



Figure 5.5 The four hypotheses: an institutional cultural approach, practical cultural approach, theoretical cultural approach and conceptual cultural approach. concept: Fawaz A. Bakhotmah..

As Hong Kong comprises plenty of practical life constituents such as private and governmental institutions, a very advanced system providing for citizens 'services, different modes of transport, has a great connection to China and it is a primary motivator for its economy. However, when we talk about design and innovation in Hong Kong, we

should discuss them through its cultural institutional approach which has one of the inclusive thought based on innovations and design! This is one of the reasons that it is not easy to explore such status of Hong Kong unless this is done by someone who has previously lived in this city for a certain period of time.

The evidence of the case study proves that, the cultural institutional approach in Hong Kong works in harmony in the development of the city towards its functional and aesthetic goals through its culture and heritage, which proves that, the decision-makers keep the city goes with the approach that save its identity. All of this undoubtedly shows the culture-based innovation, creation and designing that is established by Hong Kong's government through the institutions and the several practical societies, which include the Hong Kong Design Center. E.g. the center called on the government to make 2012 a design year for Hong Kong. More than 2 million people participated in the initiative, with most institutions providing creativity, design and innovation to the city and Hong Kong residents.

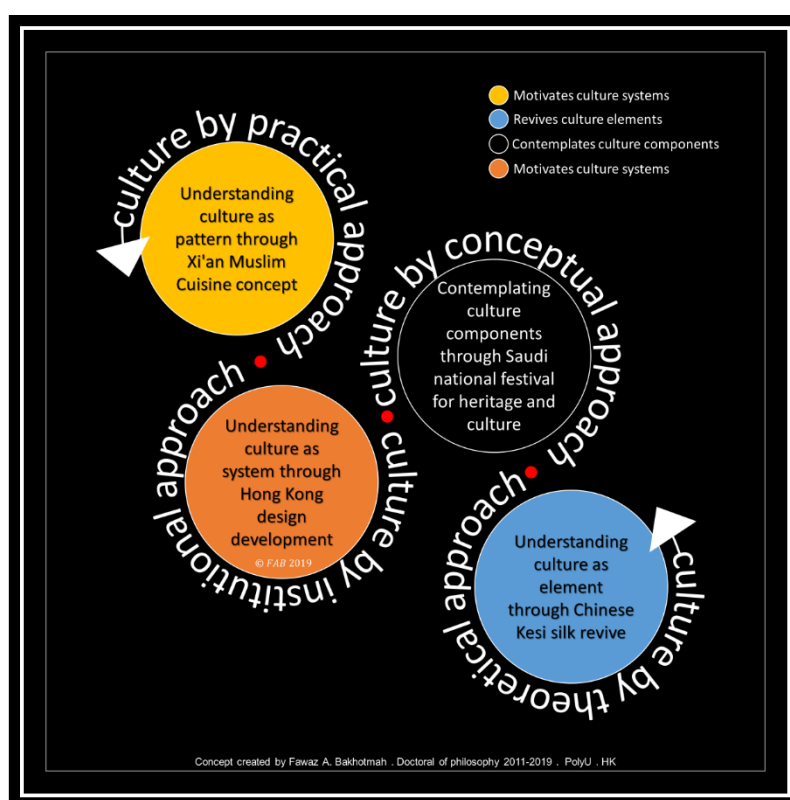


Figure 5.6 The Four Case Studies: culture as a system through Hong Kong design development, culture as a pattern through Xi'an Muslim Cuisine concept, culture as an element through Chinese Kesi silk revival and Contemplating culture components through Saudi national festival for heritage and culture. concept: Fawaz A. Bakhotmah..

We conclude that motivating culture and transforming it into products and services basically relies on the country's institutional thought towards its development, and this is what was said by Ibn Khaldun. Therefore, we can approve that there is an strong correlation between development and the institutional approach through the cultural context. Accordingly, we may say that, the country and its institutions are primarily responsible for the success or failure of the innovation and design market in general and the culture-based innovation in particular.

5.4.3. The second hypothesis, practical cultural approach highlights culture patterns

This is to push toward the activation of creativity and innovation and design in the exploitation of the talented capabilities at the level of individuals and society. We have to discover the values of the communities, culture and originality of the (analysis) and the level of its members in dealing with the " realm of things", and the extent to which they can give in "the realm of ideas" the outcome of the competence of "the realm of persons", and then to link the building of the worlds (Synthesis) through communication and mutual interaction between the urbanization community and its culture. Hence the importance of culture-based innovation, through the practical cultural approach.

Case Study 2, Understanding culture as a pattern through Xi'an's Muslim Cuisine

The study includes studying the famous Muslim district of the Xi'an Chinese city, with a focus on Chinese culture, heritage and tourism on the one side, and its economic and scientific importance on the other. Not only is this famous Muslim district famed for its Islamic food, sweets and drinks, but it is also a district studied by university students and the researchers who are interested in Chinese Islamic heritage and culture. The researcher believes that the cognitive dimension of the Islamic reality of this district still needs numerous specialized studies, because there is so much depth in the community, it is not just populated by restaurant owners, it is inhabited by owners of thought and creativity and innovations. Therefore, it is not an anomaly that Muslims would turn their neighborhood into one of China's tourist attractions. One of the tourist

attractions in Xi'an is a Terracotta Army and Muslim District, which is comprised of the oldest ancient Mosque in China, this district gives an idea of the interconnectedness of the world of science and work by the religious practices such as worship and meditation.

We can say that after this case study there were strong relations between the development and the practical cultural approach, as these Chinese trends confirm that the society can activate itself by what it has from religion and cultural capacities, and it can be effective in its economic development and can be inventive and attract new invented works to itself. The important motivator for those Muslims to work harder and prove to the whole world that their cultural capacities are better than those of their peers goes back to the Mosque, a fact that is not very well known to most. The Mosque, collects all the Muslims to worship Allah, this is the motivator, to make their works perfect and to be so merciful and keep good relations among themselves.

5.4.4. The third hypothesis, theoretical cultural approach revives culture elements

These are economic and knowledge strategies of the society, which urge the development of the population and the economy, through creative thinking. To work in innovation, this can only be achieved with the understanding of knowledge (understanding) and maximizing its investment within numerous creative channels (Augmentation), the participation of universities to promote culture and heritage through creative intellectual channels and practical innovating works. Additionally the establishment of seminars, and exhibitions, help in the formation of knowledge and economy in the society, as well as the compilation of culture and its heritage and values, chronicling stories for different age groups is one of the most important literal and cultural ideas throughout the ages in all civilizations. However, it is not an exaggeration to say that world games and electronic programs today are based on the pattern of innovative interactive stories. Therefore, the importance of the cultural theoretical approach is highlighted to find several means of educational ideas, which help to activate the economy and society of knowledge.

Case Study 3, Understanding culture as an element through Chinese Kesi silk revival

This study begins with studying the importance of ancient Chinese silk, one cannot mention Chinese civilization, culture and heritage without mention of the Chinese silk, which was famous for thousands of years and the history of China today, named "silk line" that broke through the plains, mountains and villages to deliver this luxury product from the far east to the far west through the lands of civilizations, lands of Muslims from Arabs and Persians. This line today has become the most important Chinese economic initiative after the idea was upgraded to become one belt, one road. The study on the activation of Chinese silk through the "One Inch of Kesi Silk, One Ounce of Gold" exhibition is an exhibition by Professor Tang Ming Xi, with architects Martin Riesa and Fawaz Bakhotmah. The exhibition aims to revive this precious industry through design, innovation and use within the new Chinese brands. This exhibition also encourages interested people to meditate on discovering unique ways of innovation in the industry that still maintains its delicate and arduous work of thousands of years. The exhibition included four doctoral students' research partnerships and opened the way for the community to participate in the university in the promotion of this product in line with the areas and ideas that consider the products of this era. This study further entrenches the points previously stated on the practical approach of culture.

5.4.5. The fourth hypothesis, conceptual cultural approach contemplates culture components

To build "a development Saudi cultural model ", the cultural conceptual approach is the most profound in thought and in dealing with mutual relationships between the values of religion and cultural heritage. The researcher sees that the best dealing with this ambitious development with this methodology in culture is an awareness that the scenario is enthusiastically heading towards the understanding of the future (apperception). Moreover, it is a method that is more interactive in analyzing and identifying objectives (Analysis), and an orientation that needs to maximize its knowledge

inputs (Augmentation). Understanding the dynamic of innovation and design as the art of dealing with the data of creative leadership, the directions of the changing community and inherent possibilities, it also deals with the output of literature and science (Understanding), and finally the leadership of this orientation to the capacity of the linkage between the installation of ideas and events and expectations and all the three cultural approaches (Synthesis).

Case Study 4, Contemplating culture components through Saudi national festival for heritage and culture

Saudi National Festival of Culture and Heritage, which is held annually in Saudi Arabia for two weeks and attracts hundreds of thousands of visitors from inside and outside the Kingdom of Saudi Arabia. The researcher visited the festival in its thirtieth session as a fourth case study, the concept of innovation based on culture can be applied to it. The researcher and the supervisor agree that the National Festival is a great opportunity for the Kingdom of Saudi Arabia to diversify the economy if it is used to build new production models and generate quality models of job opportunities and business forums. The festival also applies many conditions that are appropriate to the fourth entry of the cultural conceptual approach in determining the future steps of the festival through the scenario approach. The National Festival of Culture and Heritage has grown steadily in the last three decades, but does this growth have future philosophical and strategic goals in the field of creativity, innovation and design? Or is it a traditional national festival based on the use of culture and heritage in terms of preserving them and introducing people to them without investing in them and supporting the national economy with them and creating a competitive global production of them? Here comes the role of the scenario by clarifying the various points of view, whichever is the best in the future of the national development of the Kingdom of Saudi Arabia. Culture and heritage as a philosophy of festivals and events or culture and heritage as a philosophy of innovation, design and production.

Undoubtedly, the study of the National Festival through cultural innovation, specifically through the fourth entry of culture for the purpose

of upgrading it to a development project, will be one of the best examples in Saudi Arabia that can convey a message to decision-makers regarding the importance of shifting from traditional ideas to pioneering ideas and from the review to production and from simple visions to national visions. The reason for this is that there are many festivals and events that can be promoted and be generators of creativity, innovation and designing.

5.5. Culture Augmented Net (CAN)

the researcher has suggested a form that is called Culture Augmented Net (CAN) and that was defined and introduced in the methodology of the study under the name of (Knowledge Net). (CAN) is a virtual system that we are inclined to be improved so that it becomes an application that motivates gathering deep data and information related to the cultural and heritage-based issues even if it is brought from limited resources.

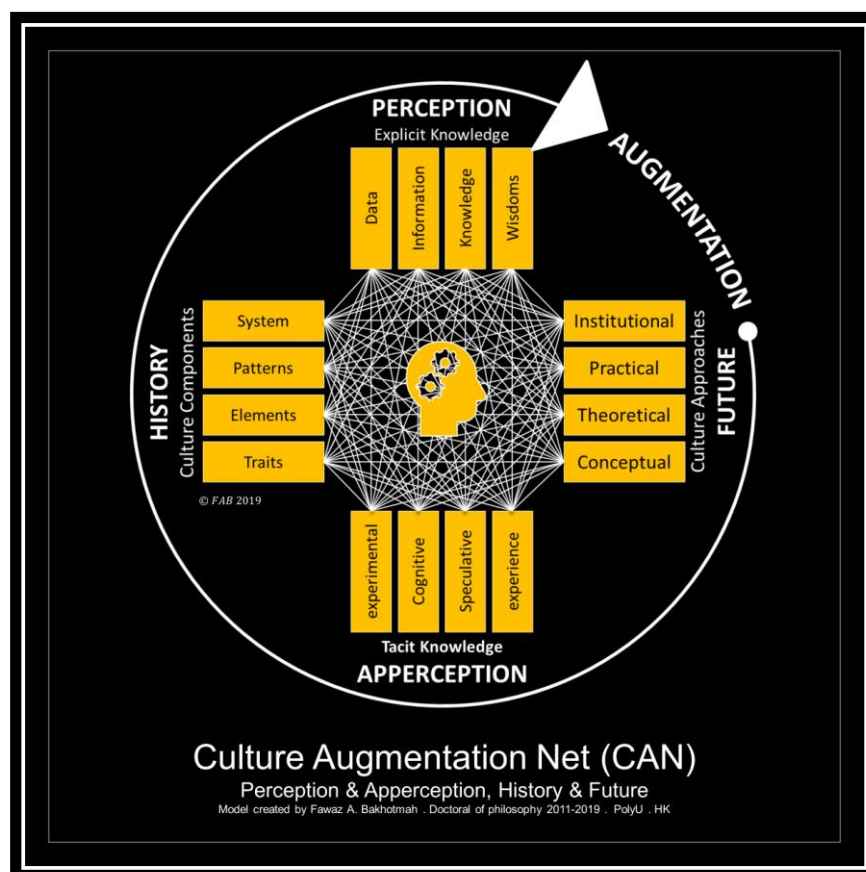


Figure 5.7 Culture Augmented Net (CAN). It is introduced in the study methodology under the name of (Knowledge Net). (CAN) is a virtual system that we are inclined to improve upon so that it becomes an application that motivates gathering deep data and information related to the cultural and heritage-based issues even if it is brought from limited resources. concept: Fawaz A. Bakhotmah..

This system can deal with the explicit and tacit type of knowledge. In addition, it can deal with the past experience, the issues of our day, and look to the future. The system consists of five stages: 1) identifying the topics of inputs that suit the issue. 2) thinking of getting data about the issue. 3) using specialized terminology which will expand the perspectives of thinking and will deepen knowledge related to the issue. 4) the stage of smart questions in which deep questions are asked. These questions are related to the issue that must be solved by the created system, and here we will see how useful the system is. 5) the final stage is augmented culture in which we imagine the current and future information or data in addition to the considerations that were achieved. This virtual system (CAN) is able to increase the data of the previous forms which are Culture Perception Criteria (CPC) and Culture Apperception Criteria (CAC)

Chapter Six

Observation of Culture

- 6.1. Observational study 1: Understanding culture as a system through Hong Kong design development
- 6.2. Observational study 2: Understanding culture as a pattern through Xi'an Muslim Cuisine concept
- 6.3. Observational study 3: Understanding culture as an element through Chinese Kesi silk revival
- 6.4. Observational study 4: Contemplating culture components through Saudi national festival for heritage and culture
- 6.5. Interpretations of the observation with culture components, culture approaches, and culture knowledge

6.1. Observational study 1: Understanding culture as system through Hong Kong¹²¹ design development

Hong Kong is part of China's history. It was under the control of the British Empire after the First Opium War (1839-1842) and was occupied by the Japanese during the Pacific War of the 1940s. Britain regained control and Hong Kong remained under its guard until it was handed over to China in 1997 following understandings with Britain. Under these understandings, Hong Kong accepted autonomous rule which recommended that Beijing should not interfere in its economy and laws except in a limited scope, making its regime and its population more liberal and democratic than the rest of China. In late September 2014, Hong Kong witnessed massive protests, with tens of thousands of students and activists demonstrating to fully democratize and guarantee the right to vote freely, allowing them to elect a new president in 2017 while retaining the right to monitor candidacies. With its support for the government and its confidence in its ability to resolve the crisis. (Aljazeera Media Network, n.d.) In June 2019, large protests again erupted in response to a proposed extradition amendment bill permitting extradition of fugitives to mainland China. The protests have continued into December, possibly becoming the largest-scale political protest movement in Hong Kong history, with organizers claiming to have attracted more than one million Hong Kong residents. (Wikipedia, n.d.)

The total area of Hong Kong is approximately 2,755 square kilometers, of which land is approximately 1,108 kilometers. The population of Hong Kong is approximately 7.5 million people. Hong Kong enjoys an innovative dynamism in political, economic, urban, cultural and scientific development. This dynamism has gained a great international reputation. It attracts many of the expertise, specialties, tourists and students in all disciplines. Hong Kong has more than 70 banks, one of the top 100 in the world. Approximately 80% of Hong Kong's manufactured products are for export. Industrial companies in Hong Kong are mainly small and medium-sized enterprises, a large proportion of which are industrial enterprises and trade names. Hong Kong is known as one of the most important services

¹²¹ Clarification, the Hong Kong cultural issues through this observational study doesn't mean that the researcher agree with all Hong Kong's political, economic, social, etc. systems. However, the researcher is respecting the creative thought that suits the thesis topic, regardless of any other circumstances.

economies in the world, with the service sector's share of GDP rising steadily, especially after China acquired most of the industries that Hong Kong was famous for. Hong Kong has one of the most important and successful telecommunications markets in the world. Hong Kong handles more than 3.5 million mail daily, 90% of which is for industry and business. Hong Kong International Airport is one of the most important hubs in the world. It is a great design and easy to use, and it often competes for first place in the world. It also has a huge seaport and an over-all public transportation system that connects all parts of Hong Kong without the need to own a private vehicle. The public transport system includes rail, tram, minibusses, taxis and ferries, all with more than 11 million trips daily. Hong Kong has nearly 1,000 kindergartens, more than 460 primary schools, more than 400 secondary schools all belonging to the public sector, approximately 60 private schools for special educational needs. This is in addition to 15 higher education institutions, and many vocational education institutions to ensure that there are comprehensive systems of vocational education and training appropriate to the needs of development and manpower in Hong Kong. Approximately 40% of the land in Hong Kong is national parks and private areas, 24 national parks have been designated for relaxation, recreation and outdoor education, and there are 22 private spaces as protected areas. Hong Kong has a leading position in the areas of innovation, design, architecture, engineering, cartoons, animation, games, digital entertainment, etc. It is also a pioneer in creative areas such as cinema, television, music, etc.

According to the latest statistics, Hong Kong has more than 32,000 creative industries related to various enterprises with over 190,000 employees. These creative industries create added value to Hong Kong's gross domestic product in the tens of billions a year. In Hong Kong's government, private institutions and universities, there is financial support for the creation of smart initiatives that promote the creative and innovative industries that have been deeply affected by the emergence of China, creating an innovative economy that will be a driving force for Hong Kong's development in all fields in the medium and long term. Below we use the Augmented culture approach proposed by the researcher to access some of Hong Kong's creative cognitive content through a virtual cultural approach to

Hong Kong's development and how to become the basis for generating ideas, innovations and designs.

6.1.1. The Level of Knowledge

The collection of explicit knowledge and the exploration of tacit knowledge, through six criteria, and enhancing the understanding of culture from an institutional perspective. Also, how to intellectually elevate it, to create a deep cognitive capability of finding innovations based on the requirements of the present and future visions:

6.1.1.1. Religion (ad-Dīn)

Most Hong Kong residents do not belong to any religion. They are either atheists or non-adherents, but Hong Kong's basic law, as we have said, allows its citizens and residents freedom to follow any religion. There are numerous religions that make up the Hong Kong community, we can divide them into three levels: the majority level, which is represented by Buddhism, Confucianism and Taoism. And then the level of prevalence observed in daily life, such as Islam and Christianity, and then the level of minorities that follow different beliefs including Sikhs, Jews, Hindus and Bahais. (wikipedia, n.d.)

Paul O'Connor¹²², author of *Islam in Hong Kong*, believes that the Hong Kong system, which is tolerant of all religions and is compatible with all nationalities and ethnicities, is a distinct environment for people's daily lives. The example of this is the context of Muslim life, which differs from the context of Muslim life in the West. Where Muslims in Hong Kong is not politicized and enjoy religious freedom, feel safe and secure, and ignore any kind of racism they may encounter because they consider themselves to be involved in building society. But these positives may be largely unavailable in the West despite the efforts of the regimes out there to prove that they are not. This fact gives Hong Kong many advantages in its global distinction. Which the author wants to dwell on with an awareness of Hong Kong decision-makers keenly:

¹²² Paul O'Connor is a qualitative sociologist interested in urban cultures and ethnicity. Originally from the UK, he has been living in Hong Kong since 2001. He is currently a Research Assistant Professor in Sociology at Lingnan University, HK.

Hong Kong is a different environment and imperfect policies and practices from other countries should not naively be transplanted into this setting... we should not simply ask what we want to change, but also what we want to preserve. What is valuable in the way Hong Kong deals with difference? What may be altered by policy changes? (O'Connor, 2012)

In the following lines, we will give an example of the Hong Kong Muslim community as an affirmation of their culture of personal freedom and the practice of religion. At the same time as a message to the HKSAR government of the importance of activating this freedom to come up with numerous ideas and innovations that increase the productivity of society and make it a multicultural model, one that is universal. After periods of isolation and being introverted within their own neighborhoods and complexes, there is a spread of mosques and places of worships within Hong Kong's urban fiber, this is fundamental and substantial evidence of the Muslims opening up and associating with surrounding communities and coexisting with society without isolation or pride. This is growth. The conduct of Muslims in Hong Kong is not associated with spreading out in the streets, parks, along bridges and inside the pedestrian tunnels to introduce their religion or their values through leaflets or books as is the case with some other beliefs in Hong Kong. They believe that their religion does not require propaganda or persuasion of others, it is left to the freedom of the individual, regardless of ethnicity or color, where his or her beliefs are to be explored, this can be attained through reading, through mosques or licensed Islamic associations or scientific debates mutually agreed on by the parties.

O'Connor suggests that everyday experiences of Muslims and others in Hong Kong should be read as a kind of promotion of development and development policies that policymakers must understand not only ostensibly but also implicitly. O'Connor also believes that the experiences of Muslims in Hong Kong are valuable and constructive, contrary to what the West is trying to promote hatred and racism against Islam. The author believes that minorities living within Hong Kong and Muslims, while enjoying a system of freedom of religion and belief, are still treated as foreigners, despite the fact

that many are born, raised, educated and work in Hong Kong. The author believes that there is a great marginalization of the Muslim community in terms of education, as minorities whose values, customs and traditions are unable to obtain appropriate and higher education, which means they cannot fully integrate into Hong Kong's society. He therefore proposes that Hong Kong open the door to policies and ideas based on the development of multi-cultural national identity. The fact that the inclusion of multiple cultures of society in terms of common national identity is far more important than spreading a culture of rejection of racism displays great societal growth. O'Connor says about his suggestions on benefiting from the Muslim community in Hong Kong:

All of my suggestions push towards the acknowledgment of Muslims as a local part of Hong Kong, as ethnic and religious minorities, as permanent residents, and as Hong Kong people rather than as foreigners. (O'Connor, 2012)

The author notes that his book did not address many of the Islamic values that are important in the development of Hong Kong in general and not just the Muslim community. Including, but not limited to, the real way of life of Muslims that urges them to be explorers, thinkers, innovators and inventors, as well as their religious values in dealing with older persons, their respect for parents, and their concern for the unity of their families. as well as their desire to have a Sharia-based financing system so that they can invest in companies that are in line with the Islamic religion in Hong Kong. These and other important things are seriously considered. Islam is part of Hong Kong's history and one of its cultural and heritage components. Therefore, the researcher believes that Hong Kong needs to activate the capabilities of Muslims and benefit from their cultural theses based on the Islamic religion. This can be done by asking several questions, including: How does the Muslim community live? How do they deal with their daily circumstances? What are their thoughts and priorities? How do they look to serve the community through their religion? What is the relationship between religion and science and work? What is Halal food and drink and how is it a profitable economy for Hong Kong? What are their aspirations and perceptions of the

future? What are the rights of Muslim domestic workers who are on the increase, and what are their sufferings due to the non-knowledge of non-Muslim families in which they work in their Islamic rights?

What is important to us from this analysis is to prove that thinking through religion and social values lead to implicit concepts and ideas that help to bring out additional ideas that deserve attention but also deserve to be an area of cultural innovation. This should be taken by Hong Kong leaders as an added value to equality and freedom, not as though it comes from the religions that characterize them.

6.1.1.2. History (at-Tārīkh)

The transcendence in the history of Hong Kong, is not the primary objective of the subject. The aim is to benefit from Ibn Khaldun's literature in the use of history as a living entity that enriches the culture of societies and nourishes the mind with continuous awareness, turning it into "urban laws" and art of the "urban development" as explained above, assembly and installation, innovation and design. These feelings differ from the mechanisms of (the historiography) or (the anthropology) history, which for them is closer to the documentation of the past details and precise scientific controls. This documentation, no matter how complete and high quality, remains rigid, until creative thought or creative behavior comes to turn a stalemate into a movement that generates new material and moral outputs. These outputs may be in the field of knowledge, innovation, art or design, or generally in the field of community service. Whatever the case, these outputs are undoubtedly sentimental relationships driven by past experiences that have been inherently intertwined with the experiences of the present tense, or because of the need for future experiences that cannot be obtained except by reference to the database of the lengthy past, which has become linked to them because of the era of knowledge and information technology, or because of sudden events that stir up certain past experiences that automatically tend to interact with the new experience that these sudden events carry. (Assaad, 1993, pp. 332-335)

Based on the above, Hong Kong in Rai researcher, describes it as an ideal destination for a thinker who wants to interact with history to explore new laws, equations and systems of life, not just read it for description, reasoning and personal theory. In other words, whoever wants a practical application of Ibn Khaldun's historical philosophy, must explore some laws, equations and systems of Hong Kong and its daily life. Why is that? It is important that these systems and rhythms are not placed in one segment of two dimensions representing space and time. However, they are placed in multiple layers of ideas, enabling us to explore inspiring points in them. These points are only abandoned data, which can be mobilized by the establishment of corridors of reflection between them and their surroundings to extract their experiences and innovations. This is the living history that Ibn Khaldun imagined was the history that can be used to take advantage of lessons from it!

For example, Hong Kong is internationally renowned for its numerous architectural designs based on the ancient Chinese philosophy of Feng Shui. But limiting this philosophy within the designs of buildings only is incorrect and underestimating the cultural value of the art of the historical Feng Shui! It is a culture that we can embrace if we give it only through design! (Apparently) implicitly between the lives of Chinese people and a culture that can be spread horizontally as it is vertically. I have already made this clear in the first section where I pointed out that one of the elements of Hong Kong culture is its visual character stemming from the transparency of its social, urban and service identity. One of the most obvious examples of this identity is the consumer products of food, beverages, sweets, clothing, toys, personal care, etc. I stated that Hong Kong stores often welcome and attract everyone, far from the complexities of the showroom, seeing what is inside the shops from a single glance and it is as if the whole shop has transformed into a showcase! This explains that this simplicity, transparency and continuity is found in a system of impressions. Amran Hong Kong is very dense and its tall buildings make a person feel like they are in an island with all the huge concrete buildings, in other words a man-made island. That is the first impression. And then upon musing, we find

that these densities and heights are only a small proportion of the amount of dense green forests on the highlands descending to connect with the water bodies of the ocean at times, and meet with the Earth at other times. This is the second impression.

The third and important impression cannot be explored except for those living in Hong Kong, where there is an integrated link between the first and second impressions. It is an integrated development structure of services, parks, social and sports spaces throughout Hong Kong within an integrated system of sustainable development. The link is man as an individual, as a society and as an institution. Therefore, Hong Kong can only be understood and enjoyed by exploring its interconnected system, seeing the inside from the outside and seeing the outside from inside is, in my opinion, the abstraction of one of the most important components of Hong Kong's urban culture stems from the Feng Shui. To confirm this proposition we have to understand the content of some of the literary texts that describe Hong Kong through the depth of the thought of her book. One of these texts was reported in a Hong Kong report 150 years ago:

The harbor of Hong Kong is one of the finest and most beautiful in the world, having an area of ten square miles, and is always crowded with shipping, presenting an animated and imposing spectacle. It consists of the sheet of water between the island and the mainland, and is enclosed on all sides by lofty hills, unfortunately bare of foliage, except where trees have been planted near the city, but pleasingly green during the south-west monsoon. The City of Victoria is magnificently situated, the houses, many of them large and handsome, rising tier upon tier, from the water's edge to a height of several hundred feet on the face of the Peak, while some bungalows are visible on the very summit of the hills. Seen from the water at night, when lamps twinkle among the trees and houses, the city, spreading along the shore upwards for four miles, affords a sight not to be forgotten. (Anonymous, 2015, pp. 2-3)

I believe this text directly or indirectly proves that the description of Hong Kong 150 years ago also needed a series of impressions in order for the mind to absorb content and realize the reality of its daily life, which is not unlike the three impressions above. Those who experience Hong Kong as a place to live in and listen to will have a completely different outlook than those who live for work or study only. The former will find Hong Kong a romantic poetry system or a beautiful musical composition, while the second one will see a large workshop with its equipment, clamor, congestion, randomness of its buildings and the narrow living space in it, in addition to the intensity of the people, their nerve and the high voices! The former knows how to explore Hong Kong and deal with it through apperception, while the second does not explore Hong Kong and knows no more than what is seen or heard from others (perception).

The former constantly seeks to know the location of beauty in Hong Kong, so as to identify beauty points in it and convince others, while the other cannot. The difference between the first and the second is heavily dependent on the stock of their multiple cultures and what their meanings are? How are they treated and dealt with? Since the researcher considers himself to be the first type, therefore the beauty that man feels in Hong Kong stems from the continuous implicit impression of realizing the place as a continuous life system in which there is much experience accumulated over time. To prove this we turn to another text of the contemporary novel Xu Xi, where Hong Kong is described in the introduction to Hong Kong-a cultural history as follows:

When in its history can a city be said to exist in the global consciousness? Hong Kong arguably has long been a part of that collective imagination. Our significance in trade and finance, tourism, even the peculiar history that is Hong Kong have all contributed to our city's stature worldwide. Meanwhile, martial arts films, fashion, Canto-pop, TV shows, and increasingly, high quality "made in Hong Kong" brands make their mark on popular culture. (Ingham, 2007, p. vi)

Between the first text and the second text, varied meanings have been created by the evolution of space over time, but with this diversity, beauty continues to grow increasingly, until it seems to be an exciting experience factor for decision-makers to develop Hong Kong. It is no coincidence that the last British governor of Hong Kong Chris Patten describes Hong Kong as an exciting city: it is one of the world's greatest maritime cities (the first text) and has colonized but still preserves the pride of its culture and Chinese culture with modern products and ideas. It is one of the few places where East and West civilizations merge in perfect harmony (the challenge of present and future). (Ingham, 2007) We can say that the previous texts give us an idea of Hong Kong's perception . But what about her special awareness?

The fact that Hong Kong particularly hopes to focus on everything in it, makes us explore ideas and observations worthy of standing and contemplating! And because they are too many, I will mention some of them, specifically those that drew the attention of some Arab intellectuals in their writings about Hong Kong. Indeed, the historian (Muhammad al-Aboudi¹²³) of ancient Hong Kong Muslims wonders why they chose to build the first mosque in a rugged mountainous area at a time where facilities such as moving escalators, even taxis and buses were not present. He says it is interesting to describe the mosque as being in the center of Hong Kong and it is above a mountain! He was also surprised when he learned that the sea was seen from the site of the mosque, which is contrary to reality today, where high buildings have obscured this view (Aboudi, 2002, pp. 100-101)

Al-Aboudi therefore proposes to develop the site of the oldest mosque in Hong Kong to be a multi-story building suitable for modern Hong Kong architecture (Aboudi, 2002, p. 98). The researcher heartily concurs with this opinion, but on condition that the current archaeological mosque is not demolished because Firstly, it is the Hong Kong historical system, which

¹²³ Muhammad bin Nasser Al-Aboudi (1926) is a Saudi writer, author and traveler. He served as Assistant Secretary General of the Muslim World League and before in the Islamic University in Medina. He visited most parts of the world. His numerous observations and reviews led him to produce more than 160 books. Granting the Medal of Merit in Literature in 1974.

must be maintained, which emphasizes the freedom of religions and beliefs. Secondly, to highlight the diversity of the Hong Kong aesthetic system through the multiple impressions we previously discussed. The researcher proposes to create an innovative global architectural design to build the first Islamic-Islamic cultural complex in Hong Kong above the existing mosque in an innovative manner, merging the current mosque with the genius of modern technology and modern construction. This is the first architectural idea of its kind in the world, the complex is home to Islamic ideas, innovations and designs that promote China's promising initiative The Belt and Road Initiative and Hong Kong is a very suitable place for such innovative service projects based on the depth of Islamic thought, which is still looking for young people to take care of their abilities and excellence. Al-Aboudi describes Hong Kong in his own views, which is called the city of escalators because they are everywhere. It is similar to the tunnel city of Makkah in Saudi Arabia for the many tunnels carved in its mountains. (Aboudi, 2002, p. 104)

In an important note that reflects the importance of beauty in the eyes of the Arab man, the slave did not conceal his wonder and admiration (with the grace of the women of Hong Kong). He says that this agility is general in them, so you do not find them heavy or rough bodied. On the food system, they do not eat everything they desire, as do the women of some other countries (Aboudi, 2002, p. 50) Is this true? He also adds another note about the women of Hong Kong, namely the seriousness of Hong Kong women. They are characterized by "the apparent seriousness of their actions ... Women walk as men do, even though they take care of their looks, especially their clothes ..." (Aboudi, 2002, p. 50) I think (slave) that there are simple words created at the University of Hong Kong classifying women with agility, physical strength and seriousness, and through his impressions of the apparent. I think this description is important, because it indirectly reflects some of the positive aspects of development in Hong Kong, including attention to design and fashion, maintaining health and healthy nutrition, commitment to responsibility and seriousness of work. All this information is at the core of everyday life in Hong Kong, which is instilled in

students during the educational stage, and then becomes a habit and lifestyle during the responsibility and professional phase, and a resident in Hong Kong knows this perfectly.

Mazen Mutabagani¹²⁴, a specialist in orientalism studies sees Hong Kong through other impressions. Where Mutabagani marvels at the abundance of al-Bakht and astrologers in Hong Kong and their customers. He wonders: Why do people in Hong Kong go to these to know the unseen or the future? Are there social studies because of the multitude of these and a large number of their clients? Do people in Hong Kong suffer from psychological, spiritual and social instability, so they need to know the future? " (Matbakani, 2011, p. 107) I think the questions raised by Mutabagani on the subject of astrologers need an innovative field study. The Mutabagani calls Hong Kong "the city of night and day" because of the relentless trade movement in the city. It is one of the strangest, according to the view of the statuettes, platforms and umbrellas that abound in different parts of Hong Kong (Matbakani, 2011, p. 108) refer to the many herbs and spice shops in the streets of Hong Kong, the Hong Kong community cannot live without these substances. (Matbakani, 2011, p. 116)

I said at the beginning of this topic that we are not going to write about the history of Hong Kong in general or monitor the views in particular. The purpose of proving that the one who wants to make culture a catalyst for creativity, innovation and design to deal with the history of Ibn Khaldun philosophy is that history is alive and moving and can be used to support Creative thinking and push towards innovative behavior, and the examples we have addressed strongly prove so.

6.1.1.3. Crafts (aṣ-ṣanā'i)

One of the things that draw attention in Hong Kong is the desire to get rid of traditional development stereotypes and the subordination of imported ideas, and to create ambitious opportunities and projects that are compatible with Hong Kong community mobility and with all available data

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and resources. In other words, the researcher has the sense that everyone who works in the public or private sector, or who has leadership, craft, or skill, etc. all seem to have a conviction (apparently) of what they are doing, but they must have the will to improve and develop what they are convinced of. Such an environment gives a strong impetus to innovation and design. In the first chapter I have reviewed two examples of how Hong Kong culture can be invested in the field of industry and entrepreneurship and I refer to the idea of Elaine Ann and the importance of the innovation and entrepreneurial community to benefit from the implicit knowledge of the legend Bruce Lee.

I also pointed to Chi-Wing Lee, wherein one of his products he successfully combined Oriental culture in drinking tea and Western culture in drinking coffee through Hong Kong's transparency and aesthetic steps imaginable in all the details of daily life we discussed earlier.

But the remarkable example of the determination of Chinese society - including the Hong Kong community - to work and insist on excellence and success is the design and manufacture of the first Chinese car called The Red Flag in 1953, which took 33 days under the supervision of Cheng Zheng. (The Red Flag) A real story that is not a fantasy, a story that makes a man who is in a stupor become fascinated by an ordinary man? A story that broke the typical boredom and stopped submission and dependence! The first car designed and manufactured in China, proved that the young Chinese arms and those who lead them at the time, are able through their simple potential mixed with their strong determination, to go without any advice from the Soviet Union at the time or even use it in the manufacture of their first car, this is only because man by nature likes to evolve and compete and prove that he is capable of innovation, design and achievement if there is determination. There was no fault in the first car made in China, made by those who had fewer skills than the auto manufacturers at the time. The disadvantage was that China was still consuming exported vehicles and not making its own transportation. The car was designed and manufactured in 33 uninterrupted days, with no distinction between morning and night. After this amazing feat, a Chinese

car is mercilessly designed, implemented and tested in a very modest way. Thanks to this determination adopted by a small group of young people, the determination of the Chinese has not stopped. Success generates success. China today has dozens of auto factories and is fully sponsored by the government and the private sector. This does not stop in the automobile industry, but extends to all sectors, industries and business leads. The story of the first Chinese car confirms what has been written about China in ancient Arabic heritage books that they are people who love work, industry and skill. The first car made in China is an important knowledge tribute to prove the strength of Chinese culture towards competitive development, whose priority must be based on generating ideas, qualifying competencies and then finding things. As I have already said, Hong Kong is based on this principle, researchers in design, innovation and those responsible for their development in the country should look at her story in detail and take lessons from it. (Zheng, 2006)

6.1.1.4. Science (al-'ilm)

Education in Hong Kong is one of the most important elements of its culture and its survival, how its economy and society are knowledge-based. However, the topic is not to review the education system in Hong Kong, but to highlight the most important points of education in promoting the development of innovation and design at the two levels: public education and higher education. In general, education, the researcher found that three volumes of design and technology for Hong Kong (Fai, 2012) were taught in 1987 and reprinted numerous times. All three volumes consist of five main chapters: Design, Graphic communication, Design process, Technology and Analytical and critical studies. These chapters, side-by-side, are included in the level of skill depth to suit each stage.

The last chapter in these volumes is of utmost importance, because the student is engaged in the completion of ten applied projects, based on the collection of information and analysis and the conclusion of the best solutions and then the completion of the project. I can describe this curriculum in its three volumes as a pioneering idea to establish a generation of knowledge of the importance of design, innovation and

technology to promote Hong Kong's knowledge-based economy and society and to graduate outstanding leaders. It is important to note the existence of another group consisting of three volumes, no less important than the first group, Home economics, which began to be taught according to the first issue in 1989, which contains many topics that have a direct or indirect relationship to the first group. I hope that education in Saudi Arabia will cooperate with education in Hong Kong to take advantage of these two groups to promote their medium- and long-term development in the areas of innovation, design, technology and economy.

As for higher education in Hong Kong, the Hong Kong Polytechnic University (PolyU Design) design school stood out as Asia's best design and art school in 2018 and one of the 25 best design schools in the world. (QS Top Universities, n.d.) (PolyU Design, n.d.). The school opened its doors in 1964 and allowed students to enroll in one of its three academic stages:

First, the bachelor's degree, consisting of seven fields, four areas of design, four years of study: Advertising, Communication, Environmental and interior, and Product Design and three other areas that will take two academic years: Digital Media, Interactive Media and Social Design. (PolyU Design, n.d.)

Second, the master's degree consists of six design umbrellas: Design Practices, Design Strategies, Interaction Design, International Design and Business Management, Multimedia and Entertainment Technology, and Urban Environment Design. (PolyU design, n.d.)

Thirdly, the doctoral course accommodates 40 to 50 students who conduct research in the fields of the school by highlighting new issues and discussing them with an in-depth philosophy of design. The school in 2014 moved from a tiny space and scattered sections of the various university buildings to a modern building designed by the late renowned architect Zaha Hadid. The building is called The Jockey Club Innovation Tower.

The reason for the designation of the building is that of intelligent investment, which represents a generous donation to construct the building from the institution that named its building. The building was a distinctive

addition not only to the University but also to Hong Kong! Since its opening it has been one of Hong Kong's most important architectural landmarks and an important landmark for tourists including architects, designers and artists. And its importance became the center of many designs, art, culture and heritage exhibitions, including lectures, seminars and workshops in the field of design and innovation. The building has multiple sections, such as the library of materials, laboratories, photography and various production facilities. It has won 9 awards. (PolyU Design, n.d.)

The researcher believes that the above is the explicit knowledge that characterizes the design school, but there is an implicit knowledge that may be unknown to many, but to those who engaged in studies or teaching in this old school. One of the implications of this school for global competitiveness and its continuing excellence is:

First. Academic freedom, a faculty member or student does not feel constrained by-laws that restrict him from achieving his or her ambitions or ideas. All services and facilities of the school and university, and all degrees of cooperation with faculties and specialties are available and open in a high-quality information environment. The university does not hinder cooperation with public or private sectors, but rather promotes strong links between Hong Kong and Chinese and international experiences in innovation and design. Communication between the university and other universities in Hong Kong is also available to those who wish to engage in it.

Second. Educational creativity, a generation that achieves China's innovation-based development policy, as we have already pointed out, can only produce an ambitious educational program for students and faculty members to be innovative, not just teachers, or students of design. This situation is noticeable in the outputs of the school, specifically for those who visit the annual exhibition and stands at the level of ideas, innovations and designs displayed. This is undoubtedly the product of the accumulation of the school's experiences from the middle of the

last century, with the help of its carefully selected local leaders, based on their great experience in the practice of design and innovation and linking them to society and the economy, often from the leading Western countries such as Britain, Germany, Holland as well as America. This does not mean underestimating local efficiency but shows a trend that reflects the content of development in Hong Kong, which takes place at the confluence of Western culture in the East as previously stated.

Third. Scientific and industrial communication, one of the most important elements of the success of the school in the eyes of the researcher is numerous partners in the academic and industrial sectors. Where the number of international educational institutions with the school and the cooperation of the equivalent of 38 institutions (PolyU Design, n.d.) and more than 100 industrial sectors are dealing with the school through research, projects or products, etc. Thanks to this communication and the art of marketing the outputs of the school scientifically and practically, the university was able to construct a new building costing more than 300 million Hong Kong dollars and design one of the best architectural structures in the world.

Fourth. The interdisciplinary school does not believe in separating innovation and design from all academic disciplines or all professional or industrial practices. This orientation makes school specialties based on the philosophy of continuous interaction and innovation. Reality shows that time has changed from individual work to innovation to community work that on the one hand links design with customs and traditions, and globalization on the other. It even linked the design with literature, poetry, font, and language, as well as computer sciences, information technology, health, sports and games. The design also reached the work of volunteering, donation and community service. Here we give an example of the level of interdisciplinary interaction through the International Design and Business Management (ID & BM) program where this program seeks to “create an impact at the

regional and global levels by meeting future talent demand of well-balanced business developers, entrepreneurs, products and services innovators” (PolyU Design, n.d.). At the level of innovation in the educational disciplines, Social Design program is emerging as a program seeking to create in social innovation to bear the future responsibility of the bachelor's degree “to expand the scope of design beyond the current commercialized and compartmentalized professional practices by orienting towards the ‘social dimension of design’, with emphasis on civic participation, social engagement and collaborative design practices, dedicated to the promotion of social and cultural sustainability, the program focuses on the realization of social innovations and civic goals through the framework of design thinking and solution prototyping” (PolyU Design, n.d.). There are multiple examples that fit into the philosophy of interaction and innovation, but we make do with the two examples above, to prove that interaction and innovation are a basic learning requirement that suits the pace of rapid development, not only in Hong Kong but also in China and the world.

Fifth. Commercial products, the school is interested in pushing its students to turn their successful projects into real commercial products within a program called SD Works “a platform assisting students from the School of Design at The Hong Kong Polytechnic University to launch their ideas into the real world, understanding optimization, issues with manufacturing companies and customers’ feedback. It further develops, produces and commercializes items designed by students” (PolyU Design, n.d.) (SD Works, n.d.).

Sixth. Communication with the graduates. The school makes communication after graduation a strategic goal. There are a number of students who graduated who have gone on to assume prominent positions among the top departments of prestigious companies and world-renowned designers in addition to some of

them becoming practitioners of advanced design and prominent figures in the creative, commercial and design industries as well as in strategic roles, etc. When students graduate, the relationship does not end there, hence, the school is interested in developing a page called Make a gift to PolyU Design, which features the names of those who graduated from it and attained fame in the world of design and innovation. (PolyU Design, n.d.) Another page that allows all graduates to join it contains a full page of information that the graduates can access and modify and even connect with its community. (PolyU Design, n.d.)

In short, knowledge in the field of design and innovation is witnessing a constant move towards promoting Hong Kong culture. Academicians, for example, have been shifting their experiences through courses or seminars to raise the value of design and innovation among human resources at the individual and institutional levels. The experiences of these specialists are real experiences and practices. The students try to work hard and establish distinctive design identities for themselves that help them after graduation to withstand the labor market, which constantly needs competitive and innovative ideas. There is a demand from the successful formation of a brand (as we have indicated) during the study by encouraging the school and faculty members. The researcher also believes that academics in Hong Kong or China are fortunate to have multiple opportunities to communicate with the largest enterprises, brands and factories.

6.1.1.5. *Urban-Style (al-'umrān)*

Living in Hong Kong and feeling the rhythm of life in it paints a full picture of the real creative dimension, especially in the field of development, urbanization and future outlook. In the eyes of the researcher, open political creativity based on freedom of belief and diversity of cultures and respect for the data of history, on the one hand, and the ongoing planning towards a strong economy and an innovative society, based on the quality of education and the availability of jobs, on the other. The two sides are the main generators of Hong Kong's global competitiveness. They appear to be the product of three interconnected systems:

First. The level of creative ideas that make Hong Kong not a province of China but an independent city-state that keeps it a leading business global center. A dynamic headquarters for services, economy, knowledge-based society, a destination for tourism, education, exhibitions, conferences and training, a place that provides an integrated architecture for the success of business entrepreneurship, innovation and design. In addition, Hong Kong has imposed itself as a key and universal gateway to enter or stay deep in China.

Second. The presence of Hong Kong leaders who have brought together the East and the West, which always ensures that Hong Kong's share of self-government is very high in all its internal affairs and regional and international relations, without prejudice to being a special administrative area of the People's Republic of China. (One country, two systems).

Third. The quality of Hong Kong projects, is carefully planned with the participation of all sectors, considering its development scenarios in the short, medium and long term, making it a natural growth city that considers the precise outputs of the first and second systems.

These three systems have automatically pushed Hong Kong to seek the ingredients of innovation to make it an ideologically sustainable development, not only in political and administrative affairs, but also in freedom of beliefs and multiculturalism, in literature and art, science and technology, philosophy, psychology, sociology, sport and recreation, etc. Therefore, all the previous creatives and many more, are one of the bases of the promotion of Hong Kong and its global competitiveness; especially, when the uncertainty factor remains strongly present in its political and economic future because of, first, the rapid growth of the economy of neighboring countries in general, and the mainland economy in particular, which took over most of the industries that had until recently been Hong Kong's most important exports and trademarks. Second, Beijing's intervention in the Hong Kong political system, including its interference in the election system, was the outcome of the 2014 umbrella revolution. It was indeed a popular outburst of anger, but it was also a perfect love

revolution that brought out the creations and artistic innovations inherent in Hong Kong's society when it was angered for its homeland and freedom!

6.1.1.6. Life-Style (al-ḥaḍāra)

Based on the three levels of al-ḥaḍāra, which the researcher concluded from Ibn Khaldun's philosophy as a methodology for assessing the approaches of culture outputs (necessary, secondary, negative) and associating them with the above analysis, we can compare al-ḥaḍāra in Hong Kong to the planet. From the realm of ideas, the realm of people and the realm of things according to the theory of Malik bin Nabi, this creativity grows in a balanced way between these three worlds. For example, a project cannot be adopted without its idea being studied, and the project will indeed be an added value to Hong Kong. It also cannot be created if there are no cases of national leadership trained in the ability to manage and develop it and build it within the highest levels of community service in Hong Kong and cultural standards. Also, a person cannot make individual decisions within the public domain or its etiquette. However, in return, all the ideas, innovations and designs resulting from the society or educational institutions or scientific societies or government bodies find open, trained and enthusiastic leaders to discuss and develop in the benefit of the Hong Kong creative process. Therefore, the interest in culture and its different format from Hong Kong's institutional perspective is moving towards positive use. It cannot be dispensed with and developed to be an effective performance within the needs of Hong Kong. If we want to give a realistic example of the difference between institutional orientation in activating culture within countries, we can give the following example to Thorsten Botz-Bornstein:

Hong Kong, in spite of its identity problems, has always been aware of its proximity to China, which represents Asian civilization just like America represents Western civilization. Dubai does not even have this default identity: it does not represent Middle Eastern civilization. Instead, it attempts to be something completely new. (Botz-Bornstein, 2012)

6.1.2. The Level of Cognition

The transformation from the level of cultural knowledge to a level of cultural cognition through three analyzing criteria: first, the formulation of concepts and cognitive ideas within a proposed definition. Second, suggesting an approach to activating the proposed concept through developmental goals that meet the requirements of the current and future requirements. Third, using the interaction between the proposed concept and the cultural approach for discovering a creative productive model that could be applied and made use of.

6.1.2.1. The concept

We pointed out that (Schafer) provided a comprehensive definition of culture to be motivated to work and not just understanding, and the definition that culture is "an organic and dynamic whole which is concerned with the way people see and interpret the world, organize themselves, conduct their affairs, elevate and enrich their lives, and position themselves in the world". If we apply this definition to Hong Kong's understanding of its institutional approach based on the information gathered from the six points of the knowledge level, Hong Kong still (to a certain extent) maintains its identity and its Chinese authenticity. The Japanese occupation could not change its identity and British colonialism could not reduce its authenticity. Hong Kong survived the cruelty of occupation and colonialism to become a global entity characterized by a culture of freedom and vitality. Hong Kong's culture of flexibility makes it digest historical experiences, adapt to current realities as a self-governing entity, whilst planning its future as an important global center in many areas of knowledge-based economy and services. Hong Kong 2030 Vision says:

Hong Kong should not only be a major Chinese city, but could become the most cosmopolitan city in Asia, enjoying a status comparable to that of New York in North America and London in Europe. (Anon., 2007, p. 19)

The Hong Kong government and its educated society have become very optimistic for their future, not only as Hong Kong but also globally, hence the slogan "let's shape a better future" has been chosen as a catalyst for realizing the Hong Kong 2030 vision for geopolitical, economic, and regional

cohesion. This is in addition to being the most important global gateway to enter the world of China. These factors play a crucial role in determining how people relate to their physical and moral environments at the level of communities, countries, continents and cultures. Those who live in Hong Kong know that their community is very open to the world. It is proud of its Chinese culture, which respects the culture, religion, beliefs, values, ethics, philosophies and convictions of others. In other words, the Hong Kong community has a sense of its existence within multiple relationships that extend from the relationship of people themselves, to the relationship of the community with the environment and nature, through the system of things and regulations and laws. Therefore, daily life in Hong Kong is intertwined between cultural microelements and cultural macro elements. This interaction is the result of the joint and deliberate interaction between the society and the institutions in terms of economic, social, political, educational and technological systems, not to mention the scheduled urban development of planning on the city level as a whole. We can say that the interaction of institutions with culture enhances the values of society, making them richer in their cultures and deeper in their development ideas.

6.1.2.2. The approach

We have already noted that the institutional approach is an approach that deals with culture through institutional visions about its concept, characteristics, definitions and activities. We also pointed out that the institutional approach is an approach capable of activating the culture in all fields of values, heritage, arts and industries, in scientific, practical, direct or indirect means. The previous definition gives a brief description of Hong Kong's interaction as a government institution with culture to promote development through society and institutions to be a creative development in its daily life and innovation in its output. We do not wish to repeat what has already been written about Hong Kong, but we want to clarify the importance of the review of the cultural situation based on the previous six points in the cognitive level and attempt to strip this situation in the definition of cultural catalyst to work, which makes us explore that there are many cultural issues that can be dealt with from a practical perspective and not

just the intellectual. For example, but not limited to, through the practical culture approach, we can develop innovative solutions to develop an understanding of the various religions in Hong Kong's society and encourage the society to express their religions and values in their own potential without the intervention of the government, or international organizations. Thus, preventing the spread of religious promoters who roam the streets at the expense of government sympathy or Missionary institutions associated with them despite the fact that other religions do not have the same physical and moral potential! We also prevent false understanding of each religion by followers of other religions, making Hong Kong a neutral global place for understanding religions, which helps the Hong Kong government give religions more freedom and provide more convenient facilities and needs. It is also possible through the culture theoretical approach to do creative research by introducing halal food and drink to Muslims, which became an important science in the world scientifically, healthily and economically, especially after Professor Irwandi Jaswir received the King Faisal International Prize in Halal Science, a promising yet beneficial science full of innovative Muslims in non-Muslim countries. (King Faisal Prize, 2018) The situation is similar to that of Chinese herbs and how they can be made universally beneficial within innovative projects such as the Muslim Halal system. If the review of culture from the institutional entry provided us with several ideas that can be developed and converted into leading models, industrial or service this too would be extremely beneficial.

6.1.2.3. The model

What is the innovative model based on culture from an institutional perspective that can be utilized in Hong Kong's case study? Paul Schafer's proposal for an interactive cultural model called the cultural model of development is based on two fundamental principles: culture as knowledge and culture as motivational characters. Both elements interact within a circle of six pillars that stimulate creativity and innovation if they are integrated into the development process in which the economy will be a part of and not an

acquisition. If we try to bring down the attitude of the government institution in Hong Kong with culture, the model can be as follows:

A. The Hong Kong Culture as Knowledge:

Hong Kong enjoys a culture of its own, which can be seen in the daily life of its community. It is a vibrant city that still retains great cultural and heritage elements. It is a very advanced city with an easy lifestyle, world-class tourist attractions and modern services. However, it cannot be described as a Western city. All the cultural components show that Hong Kong, through its development, proves that it is a city of Chinese civilization, as previously mentioned. In Hong Kong, The knowledge economy has become a cornerstone of its comprehensive development, which begins with individual competencies and ends with huge national achievements and global competition, all of which need a cultural affiliation within the concept of the strategies and laws of all public and private institutions. Therefore, there is a fundamental difference between the adoption of the knowledge economy as a theoretical strategy that does not have mechanisms to implement a strict process and control, and its adoption of facts and figures that draw a scenario for the future of planned ambitious development plans based on cultural stimuli, which can emerge from creativity and innovation and design.

B. The Hong Kong Culture as Motivation:

One of the most important cultural stimuli in Hong Kong, which can be studied extensively to take the experience is:

First, the culture of social stability and the rule of law and the abundance of security and safety in the presence of religious diversity, ideological and ethnicity is great.

Second, to deal wisely with its history, which is found here and there without placing a fence around it, it is part of the daily fabric of religious life, education, economic and maritime mobility. There is a rational cohesion between the past and the present and we should not deny that this is mere because its architectural character is closer to the Western character. Hong Kong knows that among the buildings there are

indicators that promote the existence of living authentic Chinese culture, including what is historical and what is modern.

Third, Hong Kong has a well-disciplined culture-based education system and a Western-style educational approach for those who want it. In other words, education in Hong Kong pays for the formation of its identity. This can be observed in the manner of the mobility of people, school children and transportation. However, this identity is extended, and this can be found in the fashion of the youth, in the way people deal and address each other, eat and stand in queues waiting for buses and when they are leisurely sitting in the gardens.

Fourth, working in Hong Kong reflects Hong Kong's culture as a global economic hub, from transportation and communications to security and hygiene, through banking branches, clinics and youth development centers in all the business centers. The quality of work in Hong Kong begins with a culture of shame and the use of all kinds of public transport, including airplanes. Hong Kong is surprisingly linked, making the commute for work to any of its parts not a hindrance, the only drawback is the excessive housing rentals.

Fifth, urbanization in Hong Kong has shown that it is the product of three overlapping systems: the level and quality of creative ideas, the presence of leading figures that brought together the culture of the East and the mind of the West, the quality of Hong Kong projects, where they are carefully planned with the participation of all sectors, Short-, medium- and long-term.

Sixth, Hong civilization is balanced on its five laws. This separated them regarding the idea of religion, history, education, labor and urbanization. It is a civilization within its own historical extension and geographical location; a civilization living within the necessary development, the researcher derived this narrative from Ibn Khaldun. The manner in which Hong Kong is developing cannot be described as the same as dazzling cities such as Dubai, however it is an evolution based on the development of its community's balanced happiness and its relationship

with China as a parent entity. The negative aspects of Hong Kong's development are not because they focus on secondary things in their development but because of the view of other cultures on the basis of differences of opinion, thinking and priorities.

In other words, Hong Kong should link design with a deep understanding of the social and cultural base of society. For example, one of the studies of a Chinese researcher has concluded that the study of generations and their behavior and how each generation deals with itself and with others and the impact of social heritage on it and what are the points of happiness that make one dedicated and constantly productive. Such studies should be considered because it gives the innovation and design industry strong motivation to feed the market with new products, if not new ones, then products which will have a clear impact on the development of existing products and construction to suit the various behaviors.

6.1.3. The Level of Interaction

The interaction level is a tool of synthesis at the level of cognition. The aim of this synthesis is creating, innovating or designing modern products and presenting services with identities. The application-level requires arranging of priorities based on the realm of the things we need, the realm of people leadership or the realm of creative and the best ways of thinking:

6.1.3.1. The things

The new Kowloon Cultural District is one of the largest and most prestigious Hong Kong urban projects. However, Hong Kong did not deal with this project as a need in the realm of things, which enhances its economic power or propaganda, such a project is the longest tower of economic and financial services in the world. The largest commercial complex in the world for Chinese products and is capable of doing so as the world gateway to China. But it is clear through this project that Hong Kong gives great value to ideas (the realm of ideas) that have a great relationship to culture and heritage and that puts the society (people) in the medium and long term birthing process of an innovative economy that cannot continue to think by thoughtlessly acquiring things :

In 2005 Hong Kong's authorities accepted Norman Foster's design of the new Kowloon Cultural District, a project seen as an attempt to turn Hong Kong into a global city and to further enhance its status as a major global financial center. However, "the project was met with widespread opposition questioning its scale and its relevance within the context of Hong Kong, which led to the 'opening of new spaces to imagine alternative modernities based not on the official 'world city' rhetoric but on social responsibility and ongoing cultural work.'" After intense public criticism the project was scrapped and altered designs had to be proposed in 2009 and 2010. (Botz-Bornstein, 2012)

6.1.3.2. The people

"I'm from Taiwan, but I only started to achieve my fame and ambitions when I came to Hong Kong and did not make it until I went to Beijing," says one of China's leading designers of kitchenware and restaurant equipment. "I learned from it my humanity, and Hong Kong taught me movement and hard work, China made me love its history and culture, which was an added value to my thoughts and products. This confirms that Hong Kong creates people who can think creatively and have the ability to give innovation:

The people of Hong Kong have abilities that exemplify the essence of Hong Kong as 'Asia's World City'. They have a high level of education, good language skills and are well-versed in doing business in the international arena. These skill sets are combined with a 'can-do' spirit (Gilmore, 2002) and an ability to think on their feet and be flexible in getting things done. (Botz-Bornstein, 2012)

Hong Kong recognizes that designers, artists, businessmen and other nationalities working in Hong Kong, specifically in the academic field, in research institutions, in the branches of international companies, in projects or in private businesses, all have given Hong Kong added value, making it an attractive center for competencies. A realistic model that can be used in

the competitive thinking of countries that have taken their first steps towards design and innovation.

6.1.3.3. The thinking

The world of thought and thinking in Hong Kong is witnessing continuous growth at the professional and societal levels not only because of education and knowledge-based development policy, but also because of responsibility for associations, design centers, art, economics, entrepreneurship, etc. As an example, the Hong Kong Design Center is a culturally worthy and culturally innovative enterprise that demonstrates that innovation and design have an added value in business. It is a strategic dimension of pioneering and competitive thinking in the developed world through its tangible activity at both levels: science through its interaction with public education and university education, and practical through the promotion of the importance of design within the government's various development work. Additionally private sector to be the main tributary generates renewed ideas in the fields of services and products. In general, such associations and centers give vital mobility to the city's society and its multiple activities. The Hong Kong Design Center has activities beyond Hong Kong to reach China and other countries.

The Hong Kong Design Center annually awards numerous awards to professionals, students and institutions, some at the regional level (Hong Kong level) and some at the continental level (Asia), with their own philosophy and vision. The center has many exhibitions and conferences. The most important event is the annual celebration called the Business of Design Week (BODW). It attracts the world's creatives and creative designers and presents them all with the various designers' categories etc. Knowing the importance of this annual conference is evident in the number of participants as well as the competition sponsors. The conference annually hosts a country of excellence in design and innovation under the slogan of the guest of honor to the conference, such as Germany, the Netherlands, Japan and Denmark. This approach helps to transfer the experiences of others in design and innovation on the one hand and on the other opens global horizons to invest in the fields of design and innovation

in Hong Kong. It is also worth noting that the Center is involved in developing future plans with government, university and various institutions. Another Hong Kong association that cannot be ignored when talking about design, is the Hong Kong Designer Association, which has approximately 400 designers, most of whom specialize in design. There are also, several designs and technical associations, including the Fashion Design Association, the Advertising Association, the Interior Design Association, the Architects Association, the Graphics Association, and the Business and Innovation Associations.

Overall, the institutional system in Hong Kong has a keen sense of the importance of design and innovation by promoting and activating the role of young entrepreneurship towards design, innovation and creativity. The government is certain that Hong Kong as a city of tourism, economic market and scientific headquarters will be more competitive and distinguished only by drawing on the development of all axes of design, art and innovation and activate its mechanisms to work with each other and provide all the potentials and harness the atmosphere to work these axes with lasting creativity and link it to its knowledge economy. Design The Hong Kong government has donated its old police building in one of its most prominent areas to renovate, furnish, equip and re-operate it as a creative center for designing and generating innovative ideas. It will include offices and studios for designers and creative artists of diverse nationalities, exhibitions and markets for products and most importantly it is the friction of the Hong Kong community, tourists and visitors with designers, artists and innovators. Hong Kong residents also feel the government's participation in design competitions and their adoption through multiple activities.

6.2. Observational study 2: Understanding culture as a pattern through Xi'an Muslim Cuisine concept

The Islamic religion with its constructive civilization and interactive culture - with societies - is tantamount to being a lever for social innovation in general and for innovation based on heritage and culture in particular. It was the nucleus of the first Chinese Muslim society when it settled in China a thousand and three hundred years ago. It was not confined to Chinese culture. However, it benefited from the

oppression and the sad harassment that the Muslim community has suffered at intervals over hundreds of years. However, the Chinese Muslim society has not broken its morale nor had its regard for religion weakened, but adapted to the situation to represent life and strive towards attaining great achievements, among them proving its existence as an important component of China's achievements and progress. What I saw during my visit to Xi'an, the capital of ancient China and one of the Chinese cities that have enjoyed great Islamic accomplishments throughout history, clearly shows that the Islamic religious and cultural dimension lived in China with enlightened, creative and innovative ideas.

Muslims had no destructive ideology to undermine Chinese progress and civilization. The philosophy of sustainability in the finest sense and testament to that is the Muslim neighborhood in the center of Xi'an within the limits of its old wall. History mentions that Chinese Muslims have had far more achievements than merely being the providers of halal food and beverages. However, we can say that the pattern of Chinese Muslims' lives today and their achievements have been greatly influenced by the date of the proclamation of the Chinese People's Republic in 1949 and its follow-up to 1978. This period can be divided into two stages in which systematic steps to undermine religions in China have been followed. The first phase was applied to two periods.

The first period was a kind of openness and the religious freedom guaranteed by the 1954 constitution followed by the second period in 1958, which was aimed at reducing the openness and religious freedom to implement the so-called "Great Leap Forward", which ended in 1961. By the end of this period, the stage of persecution and humiliation of all that is related to religion in order to implement the principles of the so-called "cultural revolution" based on the fight against four elements considered outdated by the ruling party; they are: Old culture, ideas, customs and traditions.

This revolution lasted for ten years and its nightmare began to disappear by 1978 (E. Alles, 2003) leaving behind painful memories¹²⁵. In spite of its popularity, it is

¹²⁵ When writing this thesis, there is a global talk about ethnic cleansing and unfair treatment by the Chinese government for the Uighur Muslims in their Muslim region. Therefore, if this persecution is true, the researcher objects to it and does not support it and hopes that China will not lose the support of Muslims worldwide who appreciate and respect modern China's renaissance, but at the same time, they are against the persecution of Muslim and non-Muslims worldwide. Mohammed Allah's Messenger

clear that the Islamic religious and cultural dimension has lived in China with an enlightened mind that moves between creativity, innovation, development, and belonging, to prove that it reflects the philosophy of sustainability in its finest sense. Yes, the Islamic community in China is "wonderful," "self-centered," and even "modern" worthy of being taken as a study from which to draw many creative ideas and innovative behaviors. And a society worthy of material and moral support for the establishment of joint investment, entrepreneurship and service projects under a modern Chinese government open to the world and a modern Chinese people eager for innovation, creativity and design.

6.2.1. The Level of Knowledge

The collection of explicit knowledge and the exploration of tacit knowledge of the Muslim neighborhood in Xi'an, through the six criteria, enhance the understanding of culture from a practical perspective. Moreover, how to intellectually elevate it to create deep cognitive thinking capable of finding innovations based on the requirements of the present and future visions:

6.2.1.1. Religion (ad-Dīn)

Islam is an integrated life system that interacted with the land of China and its people more than 1,400 years ago, so it is certain that this interaction created a special culture and created many treasures in the various sciences of knowledge and arts. Most sources mention that Islam officially entered China in 651 AD and that this date is the beginning of communication between the Islamic and Chinese nations. However, some sources say that the relationship between China and the Arabs was extended before the dawn of Islam between the Arab and Chinese nations in 138 BC. The Arab historians indicate that there are a number of Chinese ships that reached the region of the current Arabian Gulf Countries. Supporting this indication is the discovery of some coins in the fifth, sixth, and seventh century BC.

This confirms that Islam arrived in China between 620 AD or 630 AD, the period in which the Prophet Muhammad PBUH a messenger for all humanity

(ﷺ) said, "You see the believers as regards their being merciful among themselves and showing love among themselves and being kind, resembling one body, so that, if any part of the body is not well then the whole body shares the sleeplessness (insomnia) and fever with it."

was among us. The arrival of the Arabs in China is facilitated by two axes: a) Maritime axis: It was mainly through trading by sea, which helped Islam enter the south and east of China. B) Land axis: the western part of China, which is East Turkistan, which was entered by Islam during the Umayyad era, and also because of the Silk Road, which was called the caravan route and the merchants' road linking China with Asia and Europe through Turkistan. Xi'an was the starting point. (This road is being revived in China as one road, one belt, which is the largest international economic and cooperative initiative in the modern era linking China and the countries concerned. Thus, we can say that the coastal areas helped introduce Islam to China.

The internal areas like Xi'an played significant roles in the process of development and spread of Islam in China (Xi'an), until the number of Muslims reached sixty thousand and the number of families reached four thousand. This helped to build mosques and the oldest mosque was built during the Great Tang Dynasty in the seventh century. It was rebuilt several times. In (Xi'an), the Muslim community was formed, and it embraced the Islamic religion and culture of China. The Islamic history proves that when Muslims settle in a new society, they do not isolate themselves from it, but they constructively and positively interact with it, thus giving them a sense of belonging and offers them redemption, while they renounce treachery, occupation and colonialism.

The philosophy of Muslims in life is that their Islamic religion and culture has been found to be for religion and the world and for every place and time so they do not compromise on their heavenly religion and do not despise the civilizations that are contrary to their beliefs. The balance of their wisdom in this is the verse by Allah:

﴿يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنْثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا ۚ إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَتْقَاكُمْ ۚ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ﴾ (الحجرات - 13)

O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of

Therefore, they had to be highly productive in all occupations. The professionalism of Halal foods and beverages is only one of the most important creations and innovations of Chinese Muslims in modern times based on religion. However, in the following topics we will prove that Chinese Muslims' creations, ideas and affiliation to China were far beyond the beliefs that confine them to a narrow circle of life as only owners of traditional foods and beverages (Halal).

6.2.1.2. History (at-Tārīkh)

We can say that Islam from the time of its entry into China and even our present time has coexisted with eight Chinese periods, which consist of six empires and two governments. The second government is still in existence. These periods can be divided as follows:

A. The First Period

Tang Dynasty (618 - 907 AD), with its capital, the present city of Xi'an. According to the sources, the first official contact between Muslims and Chinese was during this period in 651. In Chinese records, Muslims have been known as merchant. Some sources also suggest that Chinese records describe the geography and products of the Arab world. During this period, specifically in the middle of the eighth century AD, the Chinese Empire was subjected to a great rebellion, forcing the Emperor of China to seek assistance from the Abbasid Caliph Al-Mansour in Baghdad. The Caliph Abu Jaafar Al-Mansur¹²⁷ did not hesitate to respond. He sent him units of the Muslim army of approximately 4000 soldier who were victorious in battle. This military cooperation led to the deepening of links between the Islamic Caliphate in Baghdad and the Chinese Empire. As a result, these soldiers were kept by the Emperor of China on Chinese soil and honored by marrying Chinese women. These

¹²⁶ http://quran.ksu.edu.sa/index.php?l=en#aya=49_13&m=hafs&qaree=husary&trans=en_sh

¹²⁷ Abu Jaafar Al-Mansur (714 AD – 775 AD) was the second Abbasid Caliph reigning from (754 AD – 775 AD)

events were the first phase of planting the seeds of Chinese-Arab Muslims. After that, China experienced a formal social and Islamic development within the Chinese fabric, so that the Muslims held great titles in the empire that were not given to non-Chinese. The prominent individual of this growing expansion in the scope of foreign trade with Muslims through the establishment of circles sponsored this expansion of coastal and border cities. There are also close relations between China and the Arab countries based on Arab traders and the exchange of envoys. One of the strict and fair laws for the benefit of Arab and foreign traders was the dismissal of Chinese employees who were found to be abusive to any merchant, and anyone who was found guilty of kidnapping a merchant was prosecuted.

B. The Second Period

This was the period of the rule of the five successive families (907 - 960 AD) This period did not provide much information about the Islamic presence in China. These families were often not undermined by the Islamic presence in China or by its interaction with Chinese civilization or the Chinese people. The period before the rule of Tang, after which the rule of Song was a positive and constructive period of the Islamic presence in the land of China.

C. The Third Period

Song Dynasty (960 - 1279 AD) was a period in which many innovations, including the use of banknotes, shipbuilding, gunpowder production, compass knowledge, and major development in agriculture and industry. The expansion of the economy put in place organizations and trade unions, which were internally and externally organized. In this period, it is important to note the emergence of modern Confucianism, where it has achievements in poetry and composition, in painting, ceramics, and in the printing of books. The situation of the Muslims in this dynasty was similar to the situation in the Tang Dynasty regarding respect for the Muslims. This allowed them to trade, with Muslims enjoying wider trade in the Song Dynasty than they did in the Tang. In addition, the development of political relations and the large number of Islamic

delegations increased. The number of Muslims provided great privileges in economic and political affairs.

D. The Fourth Period

Yuan Dynasty (1280-1368 AD) was the title of the Mongol Empire founded by Genghis Khan, which militarily invaded the Islamic countries and other countries of the world, including China. The Yuan family found that Muslims, being foreigners who were qualified for their scientific status and social status, were responsible for state affairs in all political, military, medical and scientific positions. Therefore, this era is characterized by the large number of Muslims arriving and settling China, which led to a large number of Chinese converts to Islam, because they found a role model and excellence in science and management with honesty, justice and proficiency.

E. The Fifth Period

Ming Dynasty (1368 - 1644 AD). This family is a Han ethnic group of China, the majority of which is characterized by their isolation, which is quite different from the families that preceded it inside and outside of China. This isolation has also had a positive effect on the Muslims within China. What is significant about them is their integration into the interior and specifically in public life. They married Chinese women and accepted certain customs that conformed to Islam and adapted to the general situation. The era of Ming was characterized by moderation in dealing with Muslims. They enjoyed privileges, because of their commitment to responsibilities as well as faithful performance of duties, therefore they were permitted to build mosques and practice their Islamic and religious life with no interference. Integrity in the work calls for justice and virtue. This period can be summed up in five points that strengthened the integration between indigenous peoples and Muslims: 1) Muslims coexist with Chinese society without affecting their religion and beliefs. 2) Muslims have become known for their good reputation. 3) The Muslims had diverse expertise in numerous fields, thus benefiting the rulers of China. 4) Establishment of good links between the family

(Ming) and the rulers of the country and the Islamic Emirates. 5) Muslims are in high-rank state positions.

F. The Sixth Period

Manchu family (1644-1912). This period was ignorant of the Islamic religion, customs and traditions, as was their harsh treatment against all those who violated them and persecuted all who disagreed with them. Which led to bloody confrontations between the government and Muslims, leading to the killing of many Muslims. This period was a difficult period for Muslims to practice their religious and social life in a way that facilitated the Muslims' determination to find creative means for their daily lives that conform to the Islamic religion.

G. The Seventh Period

The Period of the Republican Rule (1911-1949) After more than two thousand years of the country's imperial rule, a group of revolutionaries overthrew the ruling regime and the imperial court. The republican rule declares that the Chinese nation consists of five national elements (Han, Manchu, Tibet, Mongols and Muslims), all of whom are sons of the Republic of China, which does not differentiate between races and religions. Every citizen has the freedom to believe in Buddha, Jesus or Muhammad, Freedom and choice, the state has no official religion, it has freedom and choice. Liberty is the sum of the civil rights of every human being in his person, his property, his honor and his faith, which is protected by law. The flag of the Republic consisted of five colors, like the white Muslims. Muslims in this period received their rights after suffering religious persecutions for three centuries. In this republican rule, Muslims ruled many parts of China with a predominantly Muslim majority, following the central government in Beijing. When the foreign powers clashed with China, the Muslim people successfully defended their country, China.

H. The Eighth Period

Communist Rule (One Party) (1949) Chinese Communist rule was established in 1921 and Mao Zedong was officially proclaimed the party

leader in 1935. Wikipedia states that Muslims passed through four stages during the rule of this party. The first stage: (1949-1958) This stage was the stage of the founding of the State of China. The People's Assembly of China was founded in 1953, the first Muslim conference under the new regime was held in the same year, the publication of a magazine called "Muslims of China" and the establishment of a general Islamic Institute (1955-present). Accordingly, all Islamic associations and activities that had previously been in operation were abolished. The second stage: (1958-1966) the stage of the communes, a communist philosophy based on participatory ownership and abolishing private property. Consequently, there is no consideration of religion, sex, race, or independent opinion, so the tendency is to abolish religion as a moral belief of peoples. In this period, the mosques were closed and the religious rituals and customs of the Muslims were shut down. The communication between the Muslims inside and outside the country was stopped, including the cancellation of the pilgrimage missions, the conversion of Islamic Allahliness to a communist identity, and so on. The third stage: (1966-1976) stage of the Cultural Revolution, the most brutal stages witnessed by Muslims in China. The fourth stage: (1979-present) China's modern stage, where all the flagrant violations, which reached the level of criminality during the Cultural Revolution period, were corrected, which was called (Gang of Four). Today China has 56 ethnic groups. Han is the main ethnic group and accounts for more than 90 percent of China's population. Of these ethnic minorities, ten are Muslim minorities. Muslims of Hui being one of them, who are a majority and are settled in Xi'an, and are the subject of this case study.

6.2.1.3. Crafts (aṣ-ṣanā'i)

Abu al-Qasim Said al-Andalusi¹²⁸ writes in his book *Ṭabaqāt al-'Umam* (Categories of Nations) of the fifth century AH, where he said of China that it is the most peopled and the largest and biggest kingdom. It was also

¹²⁸ Abu al-Qasim Said al-Andalusi (1029–1070) was an Andalusian-Arab Muslim Qadi. He was a historian, philosopher of science and thought, and mathematical scientist with a special interest in astronomy. He was the author of the dissertation Rectification of Planetary Motions and Exposition of Observers' Errors and contributed to the Tables of Toledo.

stated that their share of knowledge in which other nations had perfected the fine-tuning of practical trades and the tightening of photographic professions. They were the most patient people and never tired of the improvement of business, and the dedication of the monument in the improvement of the trades. In the book of *Muruj Adhahab Wa Ma'adin Aljawhar* (The Meadows of Gold and Mines of Gems) of Al-Mas'udi¹²⁹ it is mentioned under the title "The Talent of the People of China": The people of China are wise and creative in engravings and works, which none of the other nations are equivalent to them. As the famous Arab traveler Ibn Battuta¹³⁰ mentioned when he visited China, the people of China are the greatest nations of the industries, and the most proficient in them. As for photography, there is no one to follow them in the rules of the Roman or any other, they have great power in them. Ibn Battuta added that he was amazed by what he witnessed and that he only entered their cities once, but saw the pictures of his companions carved on the walls and papers in the markets. Therefore, the information mentioned above through the main Arab sources that the Chinese civilization is a great civilization touched upon by Arab Muslim scientists honestly and equitably. On the other hand, it is fair and scientifically honest that the Muslim and non-Muslim researcher writes about the culture and heritage of Muslims in China and their impact on the ancient and modern civilization of China. The following are some examples of Chinese Muslims who have emerged throughout history, not only in the field of Halal food which is the limited perception about the identity of the Chinese Muslim today:

- Chinese Muslims introduced innovative architectural designs on the Chinese wooden building system, which is what we find in the arts and designs of the prayer halls in the mosques,

¹²⁹ Abu al-Hasan 'Alī ibn al-Ḥusayn ibn 'Alī al-Mas'ūdī (896 – 956) was an Arab historian, geographer and traveler. He was one of the first to combine history and scientific geography in a large-scale work, *The Meadows of Gold and Mines of Gems*, a world history. More generally, described as prolific and as a polymath, he was the author of "over twenty" works, which dealt with "a wide variety of religious and secular subjects, including history (both Islamic and universal), geography, the natural sciences, philosophy, and theology."

¹³⁰ Ibn Battuta (1304 – 1368) He was a Muslim Moroccan scholar and explorer who widely travelled the medieval world. Over a period of thirty years, Ibn Battuta visited most of the Islamic world and many non-Muslim lands, including Central Asia, Southeast Asia, South Asia and China

- Mastering the art of commanding the fleet of the sea,
- Suleiman Duin Shu, a scholar (Yunnan) in 1862, managed to carve the Holy Quran on wooden boards as a primitive means of printing the Holy Quran and providing it to those who wanted it because of their isolation from Islam abroad and their interconnectedness at home, Rendering them unable to find the most important source of the teachings of Islam - the Holy Quran. In this regard, the author Fahmi Huwaidi¹³¹ in his book (Islam in China) said "It is unknown how much time it took to have 114 Surah of the Qur'an of more than 600 pages engraved in more than 6300 verses." "It is certain that this difficult task (innovation) required great effort and patience, as well as a deep faith from his heart and his faculties.
- Shamsuddin is a Chinese Muslim leader who was considered a prominent figure in the fields of politics. He ruled (Shinjun) and (Yunnan) respectively and sought to develop collective agriculture and the establishment of schools and bridges and the construction of roads and post offices. He introduced seeds and used modern technology in the development of the local economy, Nasr al-Din al-Mutawi (1292 AD) and Hasan al-Mutawfi (1310 AD) were both prominent and famous politicians who followed in their father's footsteps in the service of China.
- The thought of the design of the Muslim neighborhoods has emerged from the standards of Islamic moral and material philosophy, which are compatible with the daily life of the Muslim man from science, work and social interaction. This was thought from the middle of the seventh century to the end of the fifteenth century when the number of Muslims residing in China increased.
- Chinese Muslims invented self-defense games.
- Chinese Muslims practiced decoration and artistic forms emanating from the Islamic spirit, which is far from the use of images of souls, which we find in artwork or ceramic pots.

¹³¹ Fahmi Huwaidi (1937) He is an Egyptian columnist. A "moderate Islamist", he writes for Al Jazeera and the Egyptian opposition newspaper Al-Dustour. He has been called "probably the most widely read Islamic political analyst.

- Writing the Arabic calligraphy through the Chinese style, which has created a new way in the work of paintings in the wonderful content and technical composition, reflecting the interaction and integration of Islamic and Chinese civilizations.
- Chinese Muslims distinguished in various industries such as furniture, utensils and others that carry the Islamic identity in their form, the painted arts and the calligraphy written on them.

6.2.1.4. Knowledge (al-'ilm)

The ancient Arabs said, "Ask for knowledge, even in China." This is based on three historical things mentioned by. Yunus Abdullah at the Islamic World University in Malaysia: First, proving that there are some direct or indirect links between Arabs and China before the advent of Islam, making China known to the Arabs when the Messenger of Allah Mohammed PBUH appeared. Second, China was known to the Arabs as a great country of significant importance in civilization, with high ethics and wisdom. Third, the Prophet (peace and blessings of Allah be upon him) used to encourage, followers of the Sahaabah and those who later entered the religion of Islam to risk their own travel to distant lands such as China to seek knowledge and wisdom. Therefore, this phrase in all cases adds value to the importance of science to Muslims and Arabs. It shows the importance of communication with China, which requires interaction on understanding this wisdom and significance, and deepen the concepts by the parties concerned by Muslims, Arabs and Chinese, which will undoubtedly lead to the discovery of the ideas of civilization, culture, science and art, which are yet to be discovered. Here are some of the scientific achievements of Chinese Muslims:

First, The period of empires (618 -1912 AD)

1. Innovating the idea of education within the mosques in the sixteenth century AD. It was a qualitative transfer in education from a Chinese Muslim religious world. China does not forget its imprint in the field of education, where it was named teacher of teachers for creating a method of transmitting science through generations. Through the

most important places of worship for Muslims at the level of China to link science and religion and not only mosques for religion, but for science, cultural as well as social communication. These schools, which were established in mosques, did not stop in the most difficult circumstances, except in the Cultural Revolution of the sixties of the twentieth century (1966-1976).

2. Among the literary innovations that were the result of closure in the era of (Ming) is the abbreviation of the Islamic names fold in accordance with the Chinese names relatively short characters. For example, the name of Mahmoud turned to (Ma) and the name of Muhammad turned to (Mo) and the name of Saad al-Din to (Sa) and Nur uddine to (Nu) and Nasreddine to (Na) and Yahya to (Yi) etc.
3. Chinese Muslims studied and developed Arab and Islamic sciences, especially in medicine, mathematics, astronomy and pharmacology. In 1382, some Arabic books on astronomy and mathematics were translated into Chinese,
4. Chinese Muslims wrote about Islam in the Chinese language after they mastered it.
5. The emergence thought of the Muslim neighborhood's design and planning in accordance with the standards of Islamic philosophy, material and moral, which corresponds to the Muslim daily life of science, work and social interaction. This was taught from the middle of the seventh century to the end of the fifteenth century when the number of Muslims increased.

Second, The period of the Republican era (1911-1949)

1. During this period, China's general and Islamic civilization witnessed a great cultural, scientific and educational renaissance, similar to the renaissance of the imperial dynasty when Islam entered China.
2. Re-opening, renovating and building mosques, which are considered the most important nucleus in the Islamic community.
3. The establishment of Islamic associations, which are the scientific centers that worked on broadcasting and spreading Islam, reviving the sciences of religion, activating civilization and Islamic education,

settling the Muslim entity at home and linking them with the Islamic nation abroad, and these associations had a great impact on the knowledge of Islamic civilization in all religious and cultural fields. They are expressed in Chinese language journals and various and varied types of religion, culture and art, translating Islamic books from Arabic to Chinese. The number of associations increased to 17 as mentioned in the book (Arab and Islamic culture in China by . Karam Farhat)

4. Rehabilitation of schools within the mosques (as we mentioned earlier) to imitate the ranks of Muslims at home after their dispersion, damage and destruction during the rule of the Manchu dynasty and break the isolation that has hit their chests for many years because of this strain.
5. Establishment of institutes: It is considered a high education center for the Islamic religion and culture, which amounted to approximately 10 institutes.
6. Cultural Missions: which have become available among Chinese Muslims and the Islamic Ummah outside China, and have had a great impact on the exchange, communication and dissemination of culture between the Arab and Chinese civilizations. These missions have been classified into individual, scientific and informational missions.
7. The Arabic Language in China: It is one of the most important languages that blossomed among Chinese Muslims because of the Quran and the teachings of Islam, which are derived from the mothers of Arabic books. Therefore, the interest in the Arabic language among the Muslims of China is of utmost importance and it is enough to visit an ancient Chinese mosque to prove this importance. The person imagines that they are in a mosque for an Arab and not a Chinese society. The Chinese Muslim House is also very interested in hanging the paintings written in Arabic and contains texts from the Koran or the famous Islamic rule.
8. Islamic translation from Arabic to Chinese; the most important translations that have been translated were the meanings of the Holy Quran into Chinese, as well as the translation of the Sunnah.

This position of science and work in Islam has made people realize that Islam is not only a religious creed but a system of daily life rich in values and ethics and a catalyst for progress and prosperity. As a result, Islam in China has risen to a prestigious cultural rank, which has enabled it to interact with traditional Chinese culture and highlight each other's beauty!

6.2.1.5. Urban-Style (al-'umrān)

The art of urbanization began in Chinese Muslim societies during the imperial era. Sheikh stated that (Muhammad Makin), "In the age of the Song Dynasty, in the Chinese ports there were areas for the Islamic communities, which were set up in mosques, hotels and markets, where the imam takes purely religious matters, and the judge rules," Sheikh Mohammed Makin also stated that; among the courtesies extended towards the Muslims of China, as written by some Chinese writers in that era, the King of China appointed a Muslim president to manage the political, commercial and religious affairs of the Muslim region, and if there was a quarrel among Muslims, Islamic rulings were implemented, however if there was a quarrel between a Muslim and a Chinese person then the judgments would be implemented using Chinese rulings.

On the other hand, the history books remind us that the traveler Ibn Battuta visited China during Yuan's rule and described this period as an opening to others that allowed Muslims and others to enter China on a large scale. In any city in China where there are Muslims who have mosques, the corners of the five prayers as well as a market, they surely have a judge and a Sheikh to oversee the affairs of Muslims to refer to them regarding matters of Islam and litigation among them.

Ibn Battuta says that communities in China are part of a mix of all Muslim lands, including the Maghreb. However present day is of the opinion that Muslims have been randomly revived out of nowhere and that they are backward and have only earned their good reputation from good food and drink. However, through the realistic observation of the old Muslim neighborhood in central Xi'an and linking it to the previous and subsequent topics, the researcher argues that the Chinese Muslims are judged by superficial physical standards. They are not governed by the implicit moral

standards of creativity; I can sum up in six points why this deserves to be part of the social innovation of Chinese Muslims:

First. From perception to apperception. The theory of manufacturing and production is the essence of development in present day China, a fact that remains undisputed. However, it cannot be said that the development is a purely material factor and a greater technology community. This is a narrow view that proves Muslims progress in China, because of the interaction between religion and the world, between the law of Islam and the reconstruction of the earth, not just the economy and technology. Therefore, the Muslim community has not hindered the creativity, innovation and determination to adapt their philosophy to the material aspect which is compatible with Islam and proves at the same time that they are a productive nation, and they can obtain high material gain and work in local and international commercial relations.

Second. From deadlock to expansion: Muslims in China have taken an interest in the positive aspects of the government's adoption of a scale of industrialization, trade, purchasing and consumption. They did not wait as a society with a national minority or feudal character that needed guidance but they were inspired. Industrialization is the essence of modernity and they are convinced of modernization and progress, but we find that the Muslim community in China imposed their needs on the market and ensured that these needs are met through the goods they bought, rented, or used. Their dealings are all conducted in good faith indifferent to the consideration of stalemate, which may be perceived by those of other intellectual beliefs which are of the same religious orientation, because they have a religious and cultural inferiority that may be seen by those who wanted to put on a display for their neighbors; The Han, on whom the Communist Party is betting, and with whom the standards of society are valued.

Third. From the traditional interaction to the modern interaction: One of the features that highlighted Muslims as people who accept

development and modernization is the wedding ceremony: the wedding dresses that they buy or rent have special specifications and designs. Weddings are larger and more expensive than most other special events where they last up to four days. The wedding ceremonies reflect some of the values of Islamic culture and hospitality, including the invitation of friends, family and relatives and the banquet exchange and recitation of the Quran as well as the welcoming of guests in Arabic, therefore wedding ceremonies in the Muslim neighborhood are of paramount importance than in any neighborhood in Xi'an. The Muslim girls also expressed through the wedding dresses that they are not to be confined to the government's perception of exclusively putting them in colorful traditional clothes. They however keep up with the fashion trends, spend money on them, do not mimic fashion styles, but innovate in their color choices of the dresses, they do not use white as others do, they choose diverse colors, which means they want to impose their own perspectives that can be admired by other people, thus setting trends and not the other way around.

Fourth. From the individual interest to the collective interest, here we give the example of alcohol that is forbidden in Islam. All Muslim men and women are committed to abstaining from drinking. When liquor began to spread in the Muslim neighborhood through the restaurants in an effort to increase their profits and meet the demand of non-Muslim customers, beautiful interventions of the neighborhood people passed through stages: 1) The discussion of the issue of alcohol in one of the Friday sermons - it shows the creativity in the importance of the Friday sermon in the direction of the community - the imam showed them the reality of alcohol in Islam and warned them of the evils and calamities. 2) The Ummah of other mosques was interested in the issue and they supported it and discussed it. 3) It turned from mere words to fieldwork. 4) The establishment of a social association or we can call it a thought based on social innovation emerged from the Committee to raise awareness of the disadvantages of alcohol and attempts to keep it

away from the neighborhood turned into setting goals, sharing ideas and a work program communicated through events and celebrations and during the advice and guidance meetings. 5) This committee has officially submitted a permit for its actions to the government - this reflects the progress in dealing with the government – however this request has been rejected because alcohol is not prohibited by the regime. 6) Turning the society from a future of awareness and advice to the pride of the Committee and pride for playing a prominent role in the prevention of the harmful effects of alcohol in the neighborhood in a civilized way. The alcohol-prevention committee says that once the neighborhood is alcohol-free, the number of quarrels and problems in the streets will be reduced, and they have proven that the prohibiting of alcohol in this area will not cause economic stagnation. On the contrary, the ban on alcohol is consistent with the government's intentions to build a society free of problems, quarrels or other harmful behaviors caused by liquor. This committee also proves the meeting of Muslims on matters of destiny called on their social differences or religious views according to old or modern concepts and that they are able to unite in solidarity to face their problems without entanglement or waiting upon the government. They can also save money to run their programs and objectives without soliciting assistance from the government.

Fifth. From money gain to entrepreneurship, traditional material gain in the world of commerce is not the orientation of countries that adopt technology and innovation. The material gain is based on the capture of opportunities and the benefit of the activation of the consumers. It turns from just bringing money to entrepreneurship to bringing money through innovation and sustainable production. A workers' leader is the person who can find new opportunities in the business world and use the important resources which enable him or her to manage these opportunities within the confines of the law efficiently. "So Chinese Muslims have shown that old customs and traditions are not retroactive but can be a major economic and developmental source within the law. For example, from the government's point of view,

Islamic food and beverages are considered foods belonging to national minorities. From the Muslim point of view, they are foods that carry religious principles, beliefs and values that cannot be renounced. From this point of view, what is of interest to the smart entrepreneur is to recognize the project under any name so long as it does not detract from its religion and Islamic culture, something in this principle has been economically developing the neighborhood and tourism, making it not just a competitor to others within China, but also making it world-renowned.

Sixth. From traditional skills to innovation and design: Undoubtedly Muslims want to innovate, create and participate in the development of China; their country in which they live, most of the Muslims in the neighborhood are supporters of its development. The residents believe that the lack of development has kept them away from innovation and design and that they are considered negative because of this, which is an opinion that they reject. Islamic food and drink today has become a modern science where we have already pointed out that one of the Muslim scientists received the King Faisal International Prize in the service of Islam because he created the science of halal within the themes of creativity, innovation and global design. And no doubt the Chinese Muslims in Xi'an and in all of China are able to engage in this science and come up with plenty of innovations and designs that correspond to the progress of knowledge and technology. Food and Halal beverages (Taher and Sharia) in proportion to the multiple production lines, the most important commitment to religion and Sharia does not separate them from their ethics, cleanliness and transactions. Halal has nutritional values based on cleanliness and its contents. Whoever commits himself to Halal, does not eat as others do. Their Halal does not involve food, but in all practices of worship, moral behavior, assets, law, ideas and transactions, it is an integrated life system. No non-Muslims can actively compete in this area because it is not purely material, as it involves many moral matters that are not understood by non-Muslims, who are knowledgeable, understanding and keen

on their religion and the responsibility of halal. Finally, it is important that Muslims have a wealth of knowledge and skills in cooking, diversity and many innovative ways to prepare a variety of dishes. A Chinese non-Muslim friend said that the best dish of fresh Chinese noodles is what Muslims offer.

6.2.1.6. Life-Style (al-ḥaḍāra)

Based on the three levels of al-ḥaḍāra that the researcher deduced from Ibn Khaldun's philosophy as a methodology for evaluating the approach of culture outputs (necessary, secondary, negative) and linking them to the above analysis; we can say that al-ḥaḍāra of the Chinese Muslims in general and the Muslim community in Xi'an in particular was within the necessary and constructive levels of development in China. There is no secondary or exaggerated level, nor is there a negative outlook that goes to the neighborhood. It is not because of the society housed in the neighborhood (the Muslim Hui nationality), but because of the shortsightedness of decision-makers in dealing with the neighborhood on the basis of two things:

First. the lack of development of the neighborhood based on the historic elements of the region and the requirements of religious Muslims (national). This makes decision-makers explain the lack of development of the neighborhood due to reasons, including: The neighborhood belongs to a national minority, which must be dealt with carefully, the difficulty of securing investors for such a neighborhood. Their desire is for the investor to be of the same nationality for two reasons; for his or her knowledge of the local situation and ability to reduce the conflicts that may arise among the population. The neighborhood depends on the private business activities, it is difficult to relocate them, what is the fate of the mosques and how to tackle the development and its response to the needs of the religious population?

Second. The lack of knowledge of Islam as a religion, not as nationalism and folklore. Islam as a religion cannot only be measured by physical dimension, it is deeper than a nation of nationalities with

limited material rituals. Islam is a religion and an integrated life system that has interacted with the land of China and its people for more than 1,300 years. Thus, it is certain that this interaction has created many treasures in the various fields of knowledge and arts. Materialism that cannot be separated from its moral consciousness, which we have mentioned some of its dynamism in previous subjects. Therefore, history tells us that Islam and its Chinese followers, regardless of the harsh circumstances, are the legendary birds. According to Françoise Oban, director of research at the Center for Chinese Studies in France, "Islam has returned as the legendary bird, it is full of health and strength and the renewed determination to self-assertion." These qualities, which the author mentioned, are derived from their original roots in China after desperate attempts to eradicate them during the 1950s in the so-called "Cultural Revolution". This was on the principle of innovation-based development to a great challenge in taking the initiative in activating Chinese Muslims to be an independent society produced with special specifications that do not apply to the standards of purely Marxist materialism, which will enhance the diversity of Chinese culture and open the horizons of civilization. This could benefit nearly two billion Muslims around the world.

Ismail Raji Al-Faruqi (International Institute of Islamic Thought) wrote that "Islamic culture is a Qur'anic culture ... its definitions, its structure, its goals, and its methods." He also clarified that "Islamic knowledge is the rational - empirical and intuitive - apprehension of every realm of reality."

6.2.2. The Level of Cognition

The transformation from the level of cultural knowledge to a level of cultural cognition through three analyzing criteria: first, the formulation of concepts and cognitive ideas within a proposed definition. Second, suggesting an approach to activating the proposed concept through developmental goals that meet the requirements of the current and future requirements. Third, using the interaction

between the proposed concept and the cultural approach for discovering a creative productive model that could be applied and made use of:

6.2.2.1. The concept

We pointed out that (Schafer) the development of a comprehensive definition of culture is a catalyst to work and not only understanding, and the definition was mentioned earlier. If we apply this definition to understanding the culture of Chinese Muslims in China in general and their society in the old neighborhood of Xi'an, especially through the practical approach based on the information gathered from the six points of the level of knowledge above, we find that there is a vast difference between the rule of the neighborhood culturally and civilization through The formal institutional approach or the judgment through the practical application approach, both are concerned with culture but from two completely different principles. Institutional access to religions, cultures and heritage on China's soil is viewed from a political and regulatory perspective of the state within the framework of the Constitution of China, which is based on a socialist spiritual construction culture (Abboudi, 1992, p. 24). However, the practical approach sees otherwise, the culture of Muslims and their heritage is the product of a long-standing religion, which has a constitution in the Koran and has a leader in Muhammad PBUH and has followers of nearly two billion Muslims around the world and has historic islands dating back more than 1300 years inclusive of the Chinese ruling dynasties. Regardless of the state of the urban neighborhood, we find that the neighborhood still (to a certain extent) maintains its identity and its Islamic appeal. The Cultural Revolution has not been able to change the message of the mosques and their identity as well as the strength of their attachment to the Muslims even though some of them have been closed for many years and others converted into venues for activities that are not suitable for Muslims.. The Cultural Revolution, or any other, could not remove the Koran from the Muslims and was able to confiscate it from their own hands, but the Quran with these frightening events remained circulated among the Muslims through their hearts, souls and minds. The Cultural Revolution has also not been able to change the concept of Muslim food and drink, etc. The Muslim neighborhood of Bashian

is an important cultural and heritage model that proves that the Islamic religion is not only routine, but also valid for all aspects of daily life and the reconstruction of the land. Therefore, the Chinese Muslims deal with their reality with great awareness that preserves their Islamic religion, values and ethics associated with it as a principle and a basis that cannot be neutralized, while at the same time respecting the law and the Constitution and beneficially adapting most of its data in a way that does not conflict with their religion.

The Muslims in Xi'an is not closed off but are following the world and realize that they have in China a large stock of their Islamic civilization that attracts many around the world. Xi'an is populated by Muslims living with the ability to communicate and make decisions together to serve the stability of their lives and eliminate their social and economic needs, whilst holding on to great hope for their futures, and these qualities make them integrated people of China's innovative and productive future. In the case of Hong Kong, we have pointed out that the interaction of institutions with culture enhances the values of society, making them richer in their cultures and more interactive towards their development ideas through the perspective of decision-makers. In the case of the Chinese Muslims in Xi'an, the exploration of the real cultures of the communities, and their interaction, enhance the understanding of the depth and importance of the trends of the culture concerned and identify most of its data without guessing, confusion or abuse, which gives us a vast amount of ideas that can be innovations and designs with a distinctive identity. We can therefore say that Chinese Muslims historically have creative abilities, innovative attitudes and wonderful and balanced interaction between material thought and moral thought in all fields. Therefore, it is unfair for Chinese Muslims to be seen as a less civilized society or a society that only understands Islamic eating and drinking. This community is at the top of culture-based innovation, because they can give religious and cultural freedom a scientific renaissance and the transfer of innovative development quality within the one road, one belt project and the participation of hundreds of millions of Muslims around the world.

6.2.2.2. The approach

I believe that the reader of this report is fully aware that there is a creative axis missing in China, which is the axis of the march of Islam, which created an innovative society that encourages creativity and acceptance of new ideas. In a still hidden opinion that did not take the right of scientific studies and field visits that explain the basic concept of Muslims towards it, Islam is not only landmarks that are visited or rituals and manifestations that are practiced or Islamic forms that are to be enjoyed, it is much greater than that, it is a religion and history, science and work, civilization and architecture. Islam in the language of the age is a culture full of elements of being a Muslim, religion resonates with excellence with the present and the future in any place and time so it is not surprising that it finds the most widespread religious growth in the world despite the difficulties it faces. China in its innovation-based development needs multiple philosophical and intellectual generators that want to sustain competition and challenge global leadership in the medium and long term.

Here we cannot ignore the Islamic dimension and its contents of new ideas and innovations that cannot only be explored through the activation of Chinese Muslims towards creativity, innovation and design. Furthermore, this activation is not only from the institutional perspective of culture, but should pave the way to explore the possibilities of Chinese Muslims without reservation from the perspective of the application, research and the philosophical. The researcher considers the importance of some universities in China to set up specialized colleges or departments to study the design, art and innovation of the Chinese Muslims because it cannot be studied through nationalities, because Islam as mentioned above is a total religion that does not divide people or deal with them based on classifications, nationalities or ethnicities, but deals with them equally and every person within this religion strives to prove its worth through a complete cultural system and takes into account the religion and the world as we mentioned earlier.

6.2.2.3. The model

What is an innovative model based on a culture that can be utilized within a social reality like the Muslim neighborhood of Xi'an? According to Paul Schafer's six-element interactive culture based on culture as knowledge and culture as motivational characters, the following model can be used:

A. The Xi'an Muslim Quarter Culture as Knowledge:

A visit to the Muslim neighborhood of Xi'an offers a religious, cultural and scientific opportunity to see a historic place more than 1,000 years old. Which makes the interested, brim with cultural and heritage feelings, which can be experienced through the view of the realities and facts of the Chinese Islamic civilization and limited through knowledge acquired by the reading of books and articles. The exploration of reality adds to the explicit knowledge, an implicit knowledge based on a sense of place through time, ideas, decisions and behaviors of societies. The most important observation is that society can participate in development when decision-makers have creative development strategies that can empower people through their cultures and heritage. Muslims viewed through the six points of knowledge of Ibn Khaldun were the owners of national initiatives and developmental contributions motivated by their religion throughout history, but when they were persecuted the first loser was the development of the country in which they live. Here is a developmental question: Are Chinese Muslims in Xi'an today with the deterioration of their current living conditions, and on China's strategic development goal of "innovation-driven development" better or was it better when their religious and cultural freedom was stifled in the Cultural Revolution? What if the level of urbanization in the neighborhoods of Muslims provided more freedom of development based on their religion and cultures? There is no doubt that decision-makers are restricted to the religions and cultures of societies by force or opinion, turning society into an imbalance between consumption and production, between tradition and innovation, between dependence and thinking. Islam is an integrated life system, in other words an integrated and continuous cultural system throughout history to the present day. But the difference

between history and reality is the difference between the story of entertainment and the lesson of development. I will focus on mentioning some of the points as cultural stimuli that can come up with plenty of creativity, innovation and design, specifically as catalysts for the social innovation that China and Hong Kong are giving great importance.

B. The Xi'an Muslim Quarter Culture as Motivation:

There are many cultural stimuli that we can deduce from the Muslim neighborhood in Xi'an, which can be extensively studied to gain experience from. However, we are satisfied with only four motivations:

1. Chinese Muslim Community Through History

The Islamic community, when it began to increase in China, through its ethics and its own cultural philosophy of life which may not have an analogy in other beliefs. It was therefore the wisdom of the Chinese Empire to make this life flourish and grow because of its knowledge that it would positively affect China's cultural and economic progress. Thus, the Tang Dynasty, the ruling family that witnessed the entry of Islam to China, agreed to form the provinces of Muslim communities considering two criteria in the science of planning and architecture. The first criterion is moral standards, which translates Islamic ethics into planning, design and technical standards related to the life of the individual and the family in Islam and its continuity with the society according to the teachings of the Islamic religion taken from the Qur'an and the Sunna. The second criterion is a physical standard of facilities that has priorities in the planning and design of Islamic gatherings; some of these facilities are represented in the mosque, school, market, open spaces, streets, housing distribution, services, etc.

2. Chinese Mosque Through History

Whoever reads the history of the entry of Islam into China, finds that building the mosque is the most important material standard that Muslims maintain. It highlights Islamic religious values emanating from the word of Allah (the Qur'an) and embodies the moral

teachings of Islam. Therefore, these values must be reflected in the Quran and Sunnah on the individual and those living in the Islamic community. Therefore, the mosque emerged as a central place for gathering people in five prayers a day as well as its social, cultural and educational message. We can say that the mosque in its true Islamic dimension is the true nucleus of social solidarity and innovation. The reason for the design of the mosques in Xi'an cannot be overlooked in designs that conform to the Chinese architectural style without any discrimination. This issue has two axes. The first axis is what the imam of the mosque said to the scholar. "The Chinese emperor ordered the mosque to be built in a similar way to Chinese imperial places. This building has the respect and appreciation of the emperor," he said. The second axis is that Muslims do not want to be distinguished in their construction of the architectural style of the place in which they live. As usual, their social behavior aims to be part of the social and architectural fabric, practicing their religious rites without exaggeration. When visiting the mosques (Xi'an), specifically the Grand Mosque, which was built more than a thousand years ago, we find it simple in its appearance and does not reflect any controlled architectural style. However, when one sees the mosque from the inside, one discovers a functional architectural philosophy that carries so much innovation and urban creativity. The internal planning of the mosque contains multiple buildings, most notably the prayer hall, Imam's residence, library, museum, reception hall, classrooms, offices and services area, ranging from ablution to bathrooms, kitchen, etc. These spaces overlap with many areas that give inspiration to the fact that the mosque is inside a large garden linked to the sky interspersed with the main motor axis, distributed to the public, semi-public and private areas for daily use or for holidaying or various occasions. The interior design of the prayer hall is an architectural masterpiece that links religion and the world through the natural interaction between the traditional Chinese wooden structure and the Islamic art of Islamic inscriptions and the unique calligraphy of the Holy Qur'an. The

attraction of natural lighting that enters the prayer hall from doors and windows increases this interaction and gives one a feeling of reassurance. Indeed anyone entering the prayer hall in the old Chinese mosque does not wish to leave because it feels comfortable, safe and quiet, an advantage that can only be felt in mosques. It is impossible to overlook the extensive use of the Arabic language on the buildings of the mosque and its facilities from the outside, they complement the spirituality of urban space. This gives an innovative dimension that integrates architecture and calligraphy. It proves that Arabic calligraphy is not exclusively for written communication, but it is also an architectural element that enters the formation of architectural spaces from the outside and inside.

3. Chinese Muslim Market

In the old urban agglomerations of the Islamic world, it is a market standard not only for the living, but it is also linked to religion and the ethics of Islamic transactions. The market is not separated from the Islamic urban community, especially the mosque, as is the case in Western design. The market in Islam is also a place of worship and has its morals that must be observed by vendors and customers. It is an essential link between worship, work and housing. When one sees the old city of Xi'an and the places around the old mosque, it paints a picture of the old Islamic market that we missed because of the development based on the western concept of markets. I think that the idea of this market, which may exist like elsewhere in China, is an excellent one, in need of creative studies to come up with many design innovations that can not only come from the point of view of physical design (explicit knowledge), but the moral of the Islamic religion that cannot be seen by the eye but can also be felt by the heart and thought (tacit knowledge).

4. Chinese Muslim Cuisine (HALAL)

It is no exaggeration to say that the most important element that attracts Muslims and non-Muslims to the old Muslim neighborhood of Xi'an is its Islamic cuisine, not its history, culture and monuments,

namely its old mosques, its streets and its Muslim community. In the eyes of the non-Muslim Chinese, the new generation of this neighborhood is a backward society. The only thing highlighted is the cuisine, which is sad when this ancient civilization has been on Chinese soil for more than 1,300 years. But it is gratifying that there is plenty of scientific research, university theses and books, which credit the Chinese Muslim community for being good traders and lovers of science and work and have an affiliation and love of the Islamic religion than Muslims living in Muslim countries. There are some theses that fear Islam and its ability to spread with its morals, love of its community and peace. This perpetuates the negative view of the Chinese Muslim society, which will change sooner or later because it does not reflect the reality of Chinese Muslim society. The avid history reader finds that all the difficulties faced by Chinese Muslims have been overcome with distinction during different historical periods as we have seen, the community continues to compete and thrive. In my opinion, eating is not the Islamic culture's main focus, but the Prophet (peace and blessings of Allah be upon him) warned against the exaggeration of eating and warned against showing off with food and wastage. Therefore, the focus on the fact that restaurants are the basis in the daily life of Muslims is correct by non-Muslims, this is their perception, but in fact Muslims in Xi'an are similar to this trend and ensure it flourishes as a smart trade, but at the same time owners of these projects, fulfill their religious duties and their connection with Allah, and fear of it in the sense that they cleverly hunt birds with one stone, they trade but innovate to be within the material concept of development in China and at the same time worship Allah by applying the moral concept of religion in food and drink.

6.2.3. The Level of Interaction

The interaction level is a tool of synthesis in the level of cognition. The aim of this synthesis is creating, innovating or designing modern products and presenting services with identity. The application level requires arranging

priorities based on the realm of things we need, the realm of people leadership or the realm of creative and the best ways of thinking:

6.2.3.1. The things

From a professional point of view, I think there is a lost creative issue in China based on the march of Islam and its culture that has created an innovative society that combines talent and creativity. I think that this process has not been seen through China's modern development based on "development driven by innovation." There is a lack of academic studies, field visits and philosophical visions that will explore and interpret the strategic dimensions of the talent, creativity and innovation of Chinese Muslims throughout history. Islam is not exclusively represented by things in ancient mosques for tourism purposes, nor is it a rite of prostration to be practiced, nor is it delicious dishes and drinks that are sensitive to religious data. Islam is much bigger than just things! Islam is a religion descended from heaven to settle in the hearts of people to create civilization, culture and architecture through it. Despite the calamities suffered by Muslims everywhere, the followers of the Islamic religion are still increasing steadily, and the only explanation for this is that the Islamic religion reacts and integrates with the present and the future with distinction in any place or time. I think that China, in its approach to development with innovation, needs a variety of philosophical resources, not just material, so the secrets of motivation in the Islamic dimension should not be cast aside.

6.2.3.2. The people

The traveler (Muhammad Nasser Al-Aboudi) says that Chinese Muslims invented from the food industry no less strange than inventions in some industries. This is indicative of the determination of the people belonging to a particular culture to move towards activating their culture available to participate constructively and to prove their sustainable contribution. Muslims as individuals and society have taken the initiative to rebuild their populations to demonstrate their success in meeting the government's urban development orientation towards adequate housing, providing sluggish meals, paying workers' wages, building materials, government fees and fines for private buildings and constructions. The members of the

affluent businessmen neighborhood donate to schools but offer outstanding scholarships and prizes and participate in the adoption of competitions and appreciation of teachers. We also mentioned earlier how the Committee of alcohol prohibition demonstrates the meeting of Muslims on matters of destiny called for their social differences or religious views according to the old concepts or modernity and they are able to unite and stand in solidarity to face their problems without entanglement or waiting for the government and they can also save money to manage their programs and goals without soliciting assistance from the government, so this committee has become their pride. This is a testament to the fact that it is important to consider that the realm of people in the real entry of culture thinks about how to generate things .

6.2.3.3. The thinking

We take advantage of the intellectual dimension in this study, that in order for Muslims and the Chinese to experience more positive interactions and collaborate on more productive projects and strive towards a common and stable future among generations, they have to cultivate the data of history and culture. China, as a great nation today, must adapt its strategies with the Muslims in general and particularly the Arabs, and not view them as a consuming or backward nation in the technology and modernization that China sees in its horizon. It is a nation with a religion that has no history, no civilization, specifically no history spanning more than 1,400 years. Today, they have settled in China either by direct invitation from the Emperor of China or by trade or willingness and culture. Today's Chinese Muslims are a very important link to the present and future of China. They have lived but interacted with all the variables of China and proved in the revolutions of the Chinese people against the oppression and resistance against the occupation of the West and Japan that their patriotism and sense of belonging cannot be separated from Chinese soil. On the other hand, all Muslims and Arabs must know the ultimate goal that China wants for itself, namely, the realization of the Communist social order through the Chinese socialist methodology, to proceed with the promotion of the Chinese Marxism carried out and supervised by the Chinese Communist Party from

three basic pillars. First, socialism with Chinese characteristics is to consider economic construction as a central task, to adhere to the four basic principles (adhere to the Communist Party line, adhere to the liberation of ideas, seek truth from reality, adhere to the service of the people with all honesty and devotion, and adhere to the system of democratic centralism). Socialism with Chinese Characteristics: It is a system of scientific theories that includes Deng Xiaoping's theory and the ideas of "Three Represents" (the Chinese Communist Party represents the requirements of the development of advanced Chinese forces and represents the direction of progress of advanced Chinese culture and represents the Basic insisted overwhelming majority of the Chinese people). Socialism with Chinese characteristics system: the political system is the fundamental system of the People's Congress. This study proves that any culture, not only Islamic, can find within it generators that drive it to creativity, innovation and design if it is exploited by people belonging to it by thinking outside the box, which Chinese Muslims have done throughout the ages. The culture within the Islamic framework can adapt to other cultures, but also to its producer without contradicting its values and decisions undertaken by decision-makers.

Finally, one of the most beautiful things intellectually located near the Muslim neighborhood is the Chinese hospital, which is stocked with Chinese herbs. It is an integrated hospital. It provides a kind of integration between Chinese thought and Islamic thought. It is known that the two cultures have a knowledge of herbs, but China cares more about it and develops it to become sources of knowledge. So, I hope that this convergence will be taken into consideration by the researchers. It is noteworthy that Ibn Sina, the great Muslim scholar in medicine, benefited from his knowledge, where much of the medicine and herbs transferred by the Arabs and mainly developed in China.

6.3. Observational study 3: Understanding culture as an element through Chinese Kesi silk revival

Kesi¹³² is a term, which refers to one of the oldest traditional crafts found in China, with high technical ability in production and a prestigious social level in use. Kesi as a term should combine the tapestry technique with silk and hand-woven material in accordance with meaningful drawings, ornaments or writings which are formed through the repetition of colorful, horizontal, non-woven and spaced textile fabrics, in a skillfully precise manner, which make the fabrics of this craft identical on both sides and with distinguished visual effects. A craft needs time and patience when practicing it to ensure an outcome of creative works, which in the past were manifested in paintings of high-precision decoration and luxurious royal apparel. Today, the products of this craft have become the manufacturing material of multiple personal products such as clothing, bags, shoes and many other accessories, as well as the manufacturing of furniture and home decoration. The most important elements of creativity in this craft is that it is capable of making figments of imagination or copying drawings and images of famous works of art to be part of the work woven by the two sides using a large number of threads; silk colored cut weft thread, which is different from the brocade technique discovered centuries before the discovery of this craft by different civilizations, including the Pharaonic, Chinese and Mesopotamia civilizations. The fact that the technique of this craft particularly depends on the cutting weft thread and the dual-sided patterns tapestry as we pointed out, makes the output of its fabric one of the most beautiful and sophisticated silk textures. The quality of the Kesi fabric depends on the skill, expertise, precision and patience of the craftsman in dealing with hundreds of silk threads in gradient colors, and with gold and silver threads if necessary. Additionally, the heightened sense of the craftsman and the ability to understand artistic content picked out from drawings or pictures and being able to sense it with every detail when transferring it on the piece of fabric to be accomplished. As this craft is classified as a type of weaving or spinning, which is based on "tapestry" it

¹³² KeSi 縹絲, Wade-Giles romanization k'o-ssu. For more general information: search 縹絲, or k'o-ssu. For specific analysis around "kesi" look at "Intermediality in Kesi Silk Tapestries in the Ming (1368-1644) and Qing (1644-1912)" PP 24-55

has multiple names in English, including "pictorial silk tapestry" or "silk-tapestry-by-cut" or "cut silk." (Bakhotmah, 2013)

This is illustrated by the definition of the British Encyclopedia:

Kesi, Wade-Giles romanization k'o-ssu, Chinese silk tapestry woven in a pictorial design the designation Kesi, which means "cut silk", derives from the visual illusion of cut threads that is created by distinct, unblended areas of color
(<https://www.britannica.com>, n.d.)

This case study about Kesi silk is not meant to be a historical discussion nor is it to allocate its specialization or its technique in detail accurately, there is plenty of information and graphics which explain this subject as seen by specialists with considerable experience in this field. The goal of this study is to emphasize the importance of dealing with culture and heritage from different angles within a specific methodological content in order to light a spark which can lead to new creations, innovations or designs based on culture and heritage from a broad interactive perspective rather than from a narrow, passive one. This perspective takes into consideration the age in which we live and absorbs the factors of originality and identity which characterize our diverse societies and civilizations. There is no doubt that the attempt to discuss the cultural aspect or heritage component through the twelve axes, which was approached by the researcher in this study and has been put to use in the two previous studies; The institutional approach to the Hong Kong case, and the practical approach into the Muslim neighborhood of the ancient Chinese city of Xi'an. As for the case of Kesi silk which we are dealing with, it would not have been taken as a case study, without it becoming an education and scientific research concern in universities and scientific societies. In other words, the theoretical or research approach to culture and heritage is significant because it can draw the attention of the public opinion and future generations to important issues and view it from multiple angles. Kesi craft depth and art and creativity cannot be perceived unless there is: 1) Familiarization based on mutual trust between the one interested in this heritage and its

development¹³³, and the experienced mentor in this heritage¹³⁴, both of which are few compared to the creative value of the craft, and the large population of China. 2) The research based on the awareness of the apparent knowledge content in Chinese, and the implicit knowledge content in the minds of the practitioners of the craft, which as previously mentioned are very few. To my Knowledge most of them do not speak any language other than their Chinese mother tongue. Professor Ming Xi Tang personally invited me to be part of the One Ounce of Gold¹³⁵ exhibition team. One Inch of Kesi Silk, allowed me to be acquainted with this sublime Chinese heritage, whose splendor and value cannot be discovered unless one has a taste for art, as we were standing in front of two strikingly similar works of art, we then puzzled over which of them is a painting by a great artist and which is piece of fabric for Kesi by a professional weaver?

What has previously been mentioned explains the researcher's tendency to categorize this case study under the Theoretical (educational) approach of culture because Kesi silk is worthy of researchers shedding some light on it in the field of innovation and design, particularly from a postgraduate level. This will reinforce the community awareness of the significance of cultural heritage in launching many new innovations and designs.

6.3.1. The Level of Knowledge

The collection of explicit knowledge and the exploration of tacit knowledge of Chinese Kesi silk revival, through six criteria, enhance the understanding of culture from an academic perspective. Also, how to intellectually elevate it to create deep cognitive thinking capable of finding innovations based on the requirements of the present and future visions:

6.3.1.1. Religion (ad-Dīn)

It is wonderful that Islam gives silk as a great apparel value and a special appreciation aesthetically, in addition to dedicating obligatory social legislation for it among Muslims wherever they are. It is the discovery that has been known

¹³³ Professor Ming Xi Tang, School of Design, Design Technology Research Centre, The Hong Kong Polytechnic University, Hong Kong, China.

¹³⁴ Mr. Wu Wen Kang, Master of Kesi Silk, Head of Dongzhu Kesi Factory, Suzhou, PRC

¹³⁵ One Inch of Kesi Silk, One Ounce of Gold - An Exhibition of China's Kesi Silk Design and Production, School of Design, The Hong Kong Polytechnic University, from May 2013 to 16 May 2013

for thousands of years in a land that is thousands of kilometers away from the birthplace of Islam. As if Allah the creator of the universe wants to tell us that a small worm, within the developmental stages of a small butterfly that only lives for a few weeks, can be a source of power on earth, so it became surrounded by cultures and civilizations, yet by economic secrets protected by the most stringent human laws and regulations. Is China not the land where silk was first discovered, yet kept the secret of this worm for a very long time with very strict imperial laws before disclosing the secret and spreading it all over the world? Whether or not we like it, all this information is for a small silkworm. Almighty Allah says in the Holy Quran:

(هَذَا خَلْقُ اللَّهِ فَأَرُونِي مَاذَا خَلَقَ الَّذِينَ مِنْ دُونِهِ ۚ) (لقمان، 11)

Such is Allah's creation". Show me, then, what any others, apart from Allah, have created" (31:11)

Therefore, it is important to address this issue with some benefit to gain additional knowledge on more points that may raise many research and exploratory questions, through which we can form ideas and innovations that on the one hand go together with the historical importance of silk material, and on the other, the ability of interaction between the age of knowledge and technology and silk. For the record, the researcher did not find a clear relationship between silk and religion within his research as he found between silk and Islam. Throughout time and history, Islam placed a high value on silk which one will not find in any other belief, civilization, culture or society. If one happens to find, it would be within the limits of the earth. As for Islam, silk is the clothing of the people of Paradise, men and women equally. It is a sign of the material that believers will be using in the afterlife. Almighty Allah says in the Holy Quran:

(إِنَّ اللَّهَ يُدْخِلُ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ جَنَّاتٍ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ يُحَلَّوْنَ فِيهَا مِنْ أَسَاوِرَ مِنْ ذَهَبٍ وَلُؤْلُؤًا وَلِبَاسُهُمْ فِيهَا حَرِيرٌ) (الحج، 23)

As regards those, who believed and did righteous works,
Allah will admit them into Gardens underneath which canals
will be flowing there they will be decorated with golden
bracelets and pearls, and their garments will be of silk
(hareer) (22:23)

Although this verse refers explicitly to silk as a garment for the people of Paradise, the following verse is truly admirable and requires excessive thinking and contemplation as it precisely describes the color, shape and type of silk that will be enjoyed by the people of Paradise. The Almighty Allah said:

(أُولَئِكَ لَهُمْ جَنَّاتُ عَدْنٍ تَجْرِي مِنْ تَحْتِهِمُ الْأَنْهَارُ يُحَلَّوْنَ فِيهَا مِنْ أَسَاوِرَ مِنْ ذَهَبٍ
وَيَلْبَسُونَ ثِيَابًا خُضْرًا مِنْ سُنْدُسٍ وَإِسْتَبْرَقٍ مُتَّكِينَ فِيهَا عَلَى الْأَرَائِكِ نِعْمَ الثَّوَابُ
وَحَسْبَتْ مَرْفَقًا) (الكهف 31)

As regards those, who accept it and do righteous deeds,
they should rest assured that We do not let go waste the
reward of such people: they will have evergreen gardens
with canals flowing beneath them: they will be adorned with
bracelets of gold and will wear green colored robes of silk
(sundus) and rich brocade (istabraq) and will be reclining
upon raised thrones What an excellent reward and what an
excellent abode! (18:31)

The researcher did not find sufficient explanation to elaborate on the scientific miracle behind Allah's choice for silk as a garment of the people of Paradise (Sundus¹³⁶) and (istabraq¹³⁷) and the color green as its design and a manufacturing technique. But I think that the interpretation of Sheikh Mohammed Metwally Al-Sharaawi¹³⁸ Qur'an over many years promotes a creative thought outside the box, where he says as meaning when Allah addresses his people through the Holy Quran about the bliss of paradise, which

¹³⁶ (sundus) a kind of brocade used in the finest types of soft and thin silk is transparent and has a brilliant luster that is worn directly on the body and touches it. (Mawdoo (Batal Aldgheem), 2016)

¹³⁷ (istabraq) a kind of brocade used in the finest types of silk, soft and thick does not heal or describe beaded threads silk, gold and silver, beautiful and has a strong luster, and is worn on the outside of . (Mawdoo (Batal Aldgheem), 2016)

¹³⁸ Muhammad Metwali Al-Sha'raawi (1911 – 1998) was an Islamic scholar, former Egyptian minister of Endowments and Muslim jurist. One of the greatest contemporary scholars who interpreted the Quran in front of people over many years till he passed away.

is unseen and only known by Allah, this speech is not devoid of two things: The first thing is that the verses concerning Paradise and its bliss have multiple gestures and contents that encourage people to activate their minds and imagination to benefit from them in finding new ideas for the reconstruction of the earth, based on endless thesis of contemplation that enhance creativity, innovation and design. The second thing is that in order for us human beings to understand the stature of paradise and its bliss, we must have knowledge of its meanings. Therefore, the Almighty uses the analogy of the unseen with all the names and attributes we know, but with this analogy there remains a miraculous content that differs from the one we know which is limited to our simple perception of the earth. Therefore, we find that one primitive Arab did not find it problematic to understand that the most precious and sophisticated clothes of the world specially made for kings and the rich will be for believers in Paradise, yet many times more, what he found problematic is his question to the Prophet Muhammad: Will the clothes of Paradise be made from creation or from woven fabric? The Prophet replied to him, proving the miracles of the genuine clothes of Paradise, as he said: Yet it will break from the fruits of paradise, where the Prophet repeated it three times for confirmation. This means that the true miracle in the clothes of Paradise is not that it is the best and most luxurious types of brocade that are made on earth, from which is the (Sundus) and (istabraq), but for the fact that these clothes will emerge from the fruits of paradise in the most beautiful, ready to use and renewable form as the believer desires. How is that possible? Only Allah knows. This is miraculous as if we thought to make the silkworm on the ground directly weave clothes without the need for her cocoons which we killed so as to extract and use its continuous thread of silk, would science ever release such an innovation? Will innovators come up with a way to complete the Silkworm life cycle to become a butterfly without killing it and without halting the permanence of the silk thread?

Nevertheless, the previous two verses are a series of numerous verses in the Quran that describe the bliss of paradise and its life in an unmatched creative manner. Prophet Muhammad PBUH described paradise as follows: **"There will be bounties which no eye has seen, no ear has heard and no human heart**

has ever perceived¹³⁹" In this respect, the author Muhammad al-Ṭāhir ibn Ashur¹⁴⁰ explains this brevity and miraculous literary and scientific creativity that matches the minds of the intellectuals, thinkers and the visionaries, as he says:

What minds can perceive depends on what could be seen of beauty; what could be heard of good sayings and good melodies; what could be imagined of the mentioned things together like the rivers of honey, wine [has a special meaning in the Islamic culture] or yogurt, castle and domes made out of pearl, trees created from aquamarine, flowers from ruby. All of that is but small things of what Allah has prepared for the believers in the paradise. No one can describe that because we can only describe what we imagine and what we have in our language. So, the prophet (peace and blessing be upon him) said: "which have never been imagined by a human being". The Muslims say that only Allah knows. (Islamweb, 2011)

Garments of silk are only a minor part of the bliss of paradise and the gratification its people enjoy. The reason behind choosing it is that it is one of the most delicate, soft and smooth textures, amalgamating the good looks which eyes can feast on and the softness of the texture which the body enjoys.

This pleasure of silk garments in paradise is indiscriminately permitted for both men and women. But it is a wonder that this pleasure is different when it comes to the law of Islam on earth. As Islam made silk an absolute pleasure for women on earth, they use it as they wish in clothing and adornment, however, it is absolutely forbidden to men with some specific exceptions that we will later delve into. Is it not truly a wonderful thing worth pausing and reflecting upon? Prophet Muhammad PBUH said, " Allah permitted silk and gold to females of

¹³⁹ Sahl bin Sa'd (May Allah be pleased with him) said: I was in the company of the Prophet (ﷺ) He gave a description of Jannah and concluded with these words, "There will be bounties which no eye has seen, no ear has heard and no human heart has ever perceived." He (ﷺ) then recited this Verse: "Their sides forsake their beds, to invoke their Rubb in fear and hope, and they spend (in charity in Allah's Cause) out of what We have bestowed on them. No person knows what is kept hidden for them of joy..." (32:16,17) [Al-Bukhari] (sunnah.com, n.d.)

¹⁴⁰ Muḥammad al-Ṭāhir ibn ʿĀshūr was born in Tunis in 1879 to an affluent family and died in 1973 at age 94. He was a writer and author on the subject of reforming Islamic education and jurisprudence. He is best remembered for his Qur'anic exegesis, al-Tahrir wa'l-tanwir (The Verification and Enlightenment). (Wikipedia, n.d.)

my nation and forbids it on its males." In another occasion, Prophet Muhammad PBUH held silk in his left hand, and gold with his right hand, and then he raised them both and said: "These two are taboo for the males of my nation and they are allowed for its females." There are many other similar instructions, while noting that the silk that the Holy Prophet means is the original natural silk that comes out of silkworm fabric. However, if this silk is industrial, it is not forbidden to men, because it is not natural silk.

One may say, what a wonder! If the garment of silk is the best garment to wear in this world and the other, why has Islam forbidden it on men although it is known to be good? Muslim scholars concluded by diligence that reasons may be the following: To refine the souls of men and teach them patience by distancing themselves from desires, especially that there is an alternative to natural silk. Some of them said, that silk was originally created for women and forbidden to men as it can be conceived as a sign of imitating women. Some of them said, that it is taboo as it is a sign of pride, vanity and elation¹⁴¹. Some said, it is forbidden because when it gets in touch with the body it gives a sense of femininity and effeminacy which goes against magnanimity and masculinity¹⁴². Some have said that if the conviction of silk prohibition on men

¹⁴¹ The Confucius had made some interpretation on the silk about 500 years BC, which shows that silk has become one of the influential habits and the extravagance manifestations of that, which has turned society from the basics of ancient Chinese belief and respect. He said, " A ceremonial cap made of linen is prescribed by the rites, but these days people use silk. This is frugal, and I follow the majority. To bow before ascending the stairs is what is prescribed by the rites, but these days people bow after ascending. This is arrogant, and—though it goes against the majority—I continue to bow before ascending." (Slingerland., 2003) (9.3) and he said also "When we say, 'the rites, the rites,' are we merely speaking of jade and silk? When we say, 'music, music,' are we merely speaking of bells and drums?" (Slingerland., 2003) (17.11)

¹⁴² Roman during the 3rd century BC had Various sumptuary laws and price controls were passed to limit the purchase and use of silk. In the early Empire the Senate passed legislation forbidding the donning of silk by men because it was viewed as effeminate, but there was also a connotation of immorality or immodesty attached to women who wore the material. **Invalid source specified.** However, Priscilla Lowry said that, in Biblical times, silk was known and valued and considered most precious, this was mentioned in the Bible 300 BC at least four times: in Chapter 16, verse 10, it says 'I clothed thee also in broidered work and shod thee with badger's skin and girded thee about with fine linen and covered thee with silk,' and in verse 13: 'Thus wast thou decked with gold and silver and thy raiment too was of fine linen and silk and broidered work.' In the Book of Proverbs it says, ' She maketh herself coverings of tapestry: her clothing is silk and purple.' (Lowry, 2008, p. 24) The author did not explain the status of silk in these verses whether it had real social interpretations within the Biblical community at that time, or it was used for some other moral interpretations. However, the researcher has been reading the explanation of these verses in both Arabic and English languages on St. Takla Haymanout Coptic Orthodox Website, but he became confused, in fact, an inquiry email has been sent to St. Takla to explain the situation for me as a researcher but there has yet to be a reply until the completion of this thesis.

in the world did not appeal to them, we say to them that in Islam there is a rule urging Muslims to absolutely and unconditionally obey Allah and His prophet. As the knowledge of Allah then the prophets and the messenger Mohammad is a revelation of Allah to them. Both are lasting and enduring, it is not limited by place or time. There may be secrets and examinations of silk which have yet to come to our knowledge. It may be forbidden to men and absolutely allowed to women in this world, and then chosen to be the bliss of paradise and absolutely available for men and women, which is the key to great social, scientific, economic or health related secrets which only Allah and the prophet know of. As a consequence, we are required to do further research and exploration as explained in the Interpretation of Sheikh Al Shaarawi. The Almighty Allah said:

(وَمَا أُوتِيتُمْ مِّنَ الْعِلْمِ إِلَّا قَلِيلًا) الاسراء اية 85

"but you have been given only a little of the 'Knowledge
(17:85)"

The researcher thinks that the reason behind disallowing men to wear the clothes made out of silk are: 1- the features of the material as a garment. 2- the features of the place as an environment. 3- the features of the human as a spirit.

These three characteristics as philosophical and design data are taught by the pioneers of design in different fields. They have the ability to comprehend it and link it to one another historically, culturally and scientifically. This conclusion may be true if we bear in mind that the Prophet Muhammad PBUH made specific exceptions for the rule of the prohibition of silk on men in the world that can be contemplated and benefited from. The first exception is that the amount of silk in the garment industry is less or no more than four fingers in the case of the belt, embroidery, or adorning the edges of the dress or so. The scholars built their conclusions on the Prophet's instructions which indicate that he forbade wearing silk except for two, three, or four fingers width in the garment. The second condition is that the silk can be worn due to skin diseases or so. The scholars built their conclusions on the instructions of the Prophet, which

indicate that it is permissible to wear silk if one has dermal itch or pain that cannot be healed or relieved but by wearing natural silk¹⁴³. There are many other issues concerning silk and men in Islam that cannot be mentioned in this thesis. What is important about the instructions of the Holy Prophet, is the intellectual and creative link between the properties of the material used (silk) and the characteristics of the place in which it is used (dress) and the characteristics of the self (human) which benefit from the properties of the material and properties of the place. These three properties are variables, which have not taken up a large space in the studies and exploration of silk. In order to illustrate these characteristics ideologically and by design, it is preferable to review an example of the design and manufacture of the first car in China in the 1950s named the red flag CA-72, as mentioned by the car designer Cheng

¹⁴³ Ibn Qayyim al-Jawziyya (1292-1350) was an important Islamic jurisconsult, theologian, and spiritual writer says:

إن الحرير من الأدوية المتخذة من الحيوان، ولذلك يعد في الأدوية الحيوانية. لأن مخرجه من الحيوان. وهو كثير المنافع، جليل الموقع، ومن خاصيته: تقوية القلب وتفريجه، والنفع من كثير من أمراضه، ومن غلبة المرة السوداء والأدواء الحادثة عنها. وهو مقو للبصر: إذا اكتحل به. والخام منه - وهو المستعمل في صناعة الطب - حار يابس في الدرجة الأولى. وقيل: حار رطب فيها وقيل معتدل. وإذا اتخذ منه ملبوس: كان معتدل الحرارة في مزاجه، مسخنا للبدن، وربما برد البدن بتسمينه إياه. قال الرازي: "الإبريسم (الحرير) أسخن من الكتان، وأبرد من القطن، يربي اللحم. وكل لباس خشن فإنه يهزل ويصلب البشرة، وبالعكس". والملايس ثلاثة أقسام: قسم يسخن البدن ويدفئه، وقسم يدفئه ولا يسخنه، وقسم لا يسخنه ولا يدفئه. وليس هناك ما يسخنه ولا يدفئه: إذ ما يسخنه فهو أولى بتدفئته. فملابس الأوبار والأصواف تسخن وتدفي، وملابس الكتان والحرير والقطن تدفي ولا تسخن. فثياب الكتان باردة يابسة، وثياب الصوف حارة يابسة، وثياب القطن معتدلة الحرارة، وثياب الحرير ألين من القطن وأقل حرارة منه. قال صاحب المنهاج: "وليسه لا يسخن كالقطن بل هو معتدل". وكل لباس أملس صقيل: فإنه أقل إسخانا للبدن، وأقل عونا في تحلل ما يتحلل منه، وأحرى أن يلبس في الصيف وفي البلاد الحارة. ولما كانت ثياب الحرير، كذلك وليس فيها شيء من اليبس والخشونة الكانتين في غيرها -: صارت ناعمة من الحكّة: إذ الحكّة لا تكون إلا عن حرارة ويبس وخشونة فلذلك رخص رسول الله صلى الله عليه وسلم، للزبير و عبد الرحمن، في لباس الحرير: لمداداة الحكّة. وثياب الحرير أبعد عن تولد القمل فيها: إذ كان مزاجها مخالفا لمزاج ما يتولد منه القمل. وأما القسم الذي لا يدفئ ولا يسخن: فالمتخذ من الحديد والرصاص والخشب والتراب ونحوها. Muhammad Ibn Qayyim al-Jawziyyah (1350), 1994 (deceased approx: 1350)

Silk is a remedy extracted from animals, therefore It is considered of animal origin. Since its produced by animals. It has plenty of benefits and a superior position. Its characteristics include: Strengthening the heart, cheering it up, and curing many of its diseases, and preventing the predominance of the black bile and the diseases that results from it, It strengthens the vision, If worn as an eyeliner. Its raw material which is used in medicine manufacturing is firstly hot and solid. It's said to be Hot and dense yet also mild. If it is to be worn: It would be mild, warming for the body or cooling by Al Razi said: Al Ibrisim (Silk) is warmer than linen, and cooler than cotton, Every rough apparel roughens the skin, and vice versa. Garments have three types: A type that warms the body and give it heat, and a type that warms it and does not give it heat, another type that does not give it heat or warms it. There is none that neither provides heat or warm the body. So what gives it heat does not necessarily warm the body. That is why the garments of fur and wool give heat and warm the body, while linen, silk and cotton warms and does not give heat. Linen garments are cold and hard, while wools are hot and hard, cottons are mild, and silk is softer than cotton and less warm. The author mentioned: Wearing it does not give heat to the body like cotton, it is mild. Every smooth apparel is satin. It is less warming for the body, and is less likely to retain heat. It is better to be worn in summer, in hot places. When silk clothes used to be like this and not hard or scratchy. People were free of itchiness, because itch is caused by heat, hardness and coarseness, hence prophet Muhammad permitted Zubair and Abdul Rahman to wear silk. To remedy itchiness. Silk garments are also not ideal places for lice to grow, as the material is not conducive for their growth. As for the type that does not warm or give heat, It must be extracted from iron ,lead ,wood ,soil , etc. Muhammad Ibn Qayyim al-Jawziyyah (1350), 1994)

Zheng¹⁴⁴ : “Apart from these attempts, we also tried to use famous silk materials from Hang Zhou for the seat cover of CA-72. The effect was really fine and surprising. However, this kind of Hang Zhou silk contains metal material. It looked magnificent and glossy but if the passengers were wearing cotton or silk, then they would become entangled resulting in the damage of the passengers’ clothes. It was also too expensive to use for seat covers. After a long period of testing and exploration, it proved that our attempt in adding the so called national characteristics into the limousine design was not successful. When we review these attempts now, it is understandable that our attempt was motivated by national pride, national emotion and respect for our own culture. This was unquestionable. But judging from the results we achieved and the failures we encountered, we must now re-examine our approaches in terms of their rational and scientific soundness. Otherwise, we would have to pay heavier prices without achieving the ultimate objectives” (Zheng, 2006)

This example clearly points out the importance of contemplation and thinking about the relationship of the properties (material, place, and person) to each other, and the significance of their overlap and harmony to reach the desired goals through reaching the best solutions and discoveries. The material used in car seats (silk) is the best that China is famous for, for thousands of years, but its characteristics did not correspond to the characteristics of the place (car). As an environment, the function of the car has to be considered prior to the aesthetic aspects which are driven by personal emotions or national slogans. Therefore, man as a being with multiple properties, should not be involved in the influence of materials and desires without knowledge or evidence, which could lead to complex problems which we may not easily be identified by our simple vision. There is no doubt that this practical illustration is a result of experience and expertise, which results in the avoidance of recurring problems or coming up with solutions through search and exploration, and this is evident in the world of cars today. Is it not then wise to respect the view of Islam on the

¹⁴⁴ Cheng Zheng, born in Tianjin of China in 1928, participated in the design and development of China's Red Flag limousine as one of the main designers and devoted his entire life to the development of China automobile industry.

prohibition of silk on men, and take a step toward a world of solutions and explorations?

By the end of this subject concerning silk and religion, it has become clear that it is a huge mistake not to take religion and values seriously within the modern data of innovation and design in general, and those related to culture and heritage in particular. Ismail al-Faruqi¹⁴⁵ mentions in his book *The Cultural Atlas of Islam*

“Islamic culture is, in fact, a “Quranic culture”; for its definitions, its structures, goals, and its methods (Ismail al-Faruqi, 1986, p. 162)

This means that the system of life in Islam, including culture and its branches is connected in one way or another to Islamic data that cannot be separated from it. It is useful to explore this data and know the foundations on which culture or heritage was built or even decisions taken. To exemplify: the project "kiswat al-ka'bah¹⁴⁶" is the largest project in the world that uses silk and silver filaments plated with gold to cover the Ka'bah in Mecca, Saudi Arabia. Kaaba is a cube-shaped building it was built by the Prophet Ibrahim with his son Ismail thousands of years ago to be a Muslim destination overtime where they reside on earth. Today Kaaba is a destination for approximately 2 billion Muslims around the world. As for the cover of Kaaba, it is meant to cover the four walls with a new covering each year woven with the jacquard method using the finest types of genuine natural silk dyed in black, and all its writing and decoration embossed using the best silver filaments plated with gold. The annual cost of Kaaba cladding is approximately 6 million dollars. Kaaba cladding is 14 meters high and its width which completely covers the four walls is 47 meters. In addition to that, there is a Kaaba door curtain made of genuine natural silk, it has a height of 7.5 meters, and a width of 4 meters, on which Koranic verses and Islamic adornments are written, and embossed with silver filaments plated with gold. Additionally, there is Kaaba belt at the top third of the cladding with a width of 95 centimeters on which some of the Quranic verses are written

¹⁴⁵ Isma'il Raji al-Faruqi (1921 – 1986), was a Palestinian-American philosopher, widely recognized by his peers as an authority on Islam and comparative religion.

¹⁴⁶ kiswat al-ka'bah (Kiswah) the cloth that covers the Kaaba in Makkah (Mecca), Saudi Arabia.

surrounded by two frames containing Islamic trappings and embossed with embroidery covered with silver filaments plated with gold. The length of the belt is 47 meters and consists of 16 pieces. In addition to some of the other embellishments that adorn Kaaba of the same type of silk and gold-plated silver filaments in the style of embossment writing. (Al Qafilah - Saudi Aramco, 2011) Is it not a project that strongly illustrates the link of religion to creativity, innovation and design?

6.3.1.2. History (at-Tārīkh)

We have pointed out that the words (Kesi, K'o-ssu, 緯絲¹⁴⁷) contain one meaning for a craft of silk weaving, which is considered one of the most important components of China's cultural heritage, which dates back to thousands of years. The technique of this craft is generally referred to in English as a tapestry, but this term is not related to the material used in this craft which is silk. In other words, if wool, cotton, rayon or any other material is being used instead of natural silk using the same technique, the English term remains the same, but what distinguishes the Chinese term from the English term is that tapestry and natural silk contribute to the formulation of the Chinese term in one way or another¹⁴⁸. Kesi is still practiced today by professional weavers called "master" where their products are one of the most important Chinese traditional products that illustrate precision, beauty and patience during implementation. It is evidently controversial when and where Kesi was founded as well as its pronunciation , therefore it is useful to review some of the writings about it and learn about the source of controversy.

The first to ever write about the origin of Kesi and how its Chinese term was formed is Schuyler Cammann ,within his research paper entitled Notes on the Origin of Chinese K'o-ssü Tapestry, where he explained two things about its origin:

¹⁴⁷ More detail at Alexandra Tunstall's Doctor of Philosophy dissertation. Intermediality in Kesi Silk Tapestries in the Ming (1368-1644) and Qing (1644-1912) Dynasties. "chapter one, Kesi Tapestry Weave: Terminology and Technology"

¹⁴⁸ Researcher opinion based on "Sheng documents the use of tapestry weaving in the Xinjiang region during the Han dynasty. This weave uses wool, not silk, and cannot be considered Chinese kesi." (Tunstall, 2015, p. 6)

"The first specific reference to k'o-ssu, or "pictorial silk tapestry," in Chinese literature dates from the Northern Sung Dynasty (960--1179 A D.), when China had settled down to a quiet period of cultural development after the dynamic activity of the Tang had spent itself" (Cammann, 1948)

The British Encyclopedia (Encyclopaedia Britannic) is not fundamentally different from Cammann's point of view, but it came out with important details regarding the time of emergence as it indicates:

The earliest surviving examples of Kesi date from the Tang dynasty (618–907), but it first became widely used during China's Southern Song period (1127–1279). The technique became particularly popular during the Ming period (1368–1644) and thrived until the end of the Qing dynasty in 1911/12.
(The Editors of Encyclopaedia Britannica, n.d.)

But the essential part that Cammann drew to the attention of researchers is: First, Kesi may have originated in other locations outside of China¹⁴⁹ in the north-west, particularly in so-called Central Asia or Near East, which made the people of these two regions namely Uighurs¹⁵⁰ and the Khitans improve it, as they were known for their high professional skills in the Song Dynasty era (960-1279). Second, the term "k'o-ssu" Kesi is the output of a sound adaptation¹⁵¹ of a foreigner that might have been of Arabic or Persian origin. Due to the importance of these two points of view, it is useful to illustrate them with some consistency as stated in the abstract of Cammann's paper as he said:

We have seen that, despite the claims of modern Chinese that k'o-ssu originated at Ting-chou in the Sung Dynasty, the technique as such was apparently acquired from the Uighurs.

¹⁴⁹ Also "Responding to demand for the strong, light, beautiful fabric, China made silk a principal export for many centuries. At the same time, techniques of weaving were imported into China. Among these was kesi tapestry weave." (Tunstall, 2015, p. 159)

¹⁵⁰ "The role of the Uyghurs in the development of kesi is well known, and it would appear that the superb quality of Liao kesi owes much to Uyghur influence" **Invalid source specified.**

¹⁵¹ "most scholars accept Cammann's assertion that the term kesi must be a phonetic adaptation of a foreign word (and therefore a foreign technique) that had no direct translation in Chinese." (Tunstall, 2015, p. 6)

The Uighur word for their silk tapestry robes, rendered in Chinese as k'o-ssu, seems to have been an attempt to transcribe the Persian word qazz, or the Arabic khazz¹⁵², also used in Persian, to mean fabrics of raw silk... It would seem to show, however, that this technique of making pictorial silk tapestry - as opposed to the older Chinese type - arose in Central Asia, probably in Sogdiana, as a development out of the earlier wool tapestry. Though it could also have arisen in the Near East from the same background, perhaps independently. Apparently, this then reached China by way of the Uighurs, about the beginning of the 11th century, and there, under the genius of Chinese craftsmen and artists, enjoying the patronage of a highly sophisticated court, it reached its culmination in a true art capable of reproducing the finest paintings. (Cammann, 1948, p. 109)

From a personal point of view, we can say most of the scholars who debated over Kesi, specifically with respect to its origin and Chinese term, Cammann's paper would be an integral part of shaping their perspective. I cannot mention many of these papers here, but one of the good ideas built on this point of view is the conclusion of Amina Malago in her paper *The Origin of Kesi, the Chinese Silk Tapestry*¹⁵³, that there are three hypotheses concerning the emergence of Kesi in China: The first hypothesis, considers Kesi to be one of the new trades that was settled by nations of China's western regions for motifs touched upon by Cammann which we have previously mentioned, or it is possible that Kesi has emerged as a result of getting the internal development of China influenced

¹⁵² Islamic civilization in general and specifically the Arab Islamic civilization has a great amount of Arabic detailed names for all circumstances of e.g. silk, such; production, design, technical, places and manufacturing. However, it needs a serious collaboration of Arab-Chinese scholars to investigate these details through the Arabic heritage sources and the old Arabic dictionaries. However, Chinese scholars, researchers, and students must delve deeper than that, with what has been written about their culture and heritage in relation with Muslims and Arabs from the Western sources in English or other languages. Evidently, the researcher from his reading is sure that Kesi and other famous Chinese heritage has a specific Arabic term of more than 1500 years ago.

¹⁵³ Amina Malago has another important paper regarding "KESI, CHINESE LITERARY SOURCES IN THE STUDY OF SILK TAPESTRY" (1991) she had argued that "Chinese literary documents used in the study of Kesi, on the one hand represent an indispensable source, yet on the other hand their interpretation gives rise to many uncertainties that regard all aspects of the subject, due to the inaccuracies and contradictions that can be found in the various texts."

by cultures of communities that had commercial, cultural or social exchanges with China. We have also addressed such an issue in the previous study and how China's relationship with Arabs and Muslims has become more strategic, more in-depth and more interactive¹⁵⁴. The second hypothesis is that Kesi may have already existed long ago in China and then disappeared because of the emersion of other textile techniques, and then it re-emerged when ornate textiles became a popular and lucrative business and a sign of luxury and wealth. In other words, Kesi may have become a heritage at some point which was wiped out then revived again, which is not surprising when we project it to our modern reality. The third hypothesis is that Kesi, might be a craft which was practiced a long time ago and may date back to the period of textile production in China using materials other than silk. However, according to Malago, this hypothesis has no evidence of tangible impact or written documents. Nevertheless, the consideration of the three above mentioned hypotheses according to Malago is not devoid of notes, so it seems that the origin of Kesi remains ambiguous . (Malagò, 1988)

Based on the above mentioned, the researcher finds that the origin of Kesi and its mysteries, should not only be seen from a historic, archaeological or genetic perspective. But it is also a rich field for creative thinking and also the field of design thinking as Kesi has a great relationship today with art, design, and innovation and studying it from these aspects assists in finding new ideas about the place and time of its origin as well as the surrounding circumstances, such as ideas and development. For instance, the researcher suggests some ideas to identify Kesi historically:

¹⁵⁴ To know how strong China's internal development has been influenced by the other cultures exchange; look at "GLOSSARY OF CHINESE ISLAMIC TERMS" by Jianping Wang, he wrote "In studies of regional Islam in the world, Islam in China is perhaps one of the most difficult subjects. There are three reasons. First, China's Muslim communities are widely scattered and hence so diverse that any generalization easily causes errors. Second, the Chinese Muslims are a mix of different races, languages, customs and cultures. Moreover, these different sub-groups are intersected even further by factionalism (e.g. between competing Sufi orders). Third, Islam in China has always existed in interaction with other Chinese religions and cultures, resulting in a synthesis between Islamic and Chinese elements, the extent of which varies from community to community.**Invalid source specified.**

A. The first idea

Considering that Kesi is a Chinese technique and it became a natural development of silk discovery when its uses and industry varied and its trade flourished. The credibility of this idea can be reinforced by the historical sources that confirm that China is the land of silk and its civilizations have been existence long before the birth of Christ. Therefore, the Chinese were the first to use silk and they were the first to create it, and the demand for Chinese silk is what created innovations and technical inventions to meet its renewable designs and various uses. Therefore, silk became a global commodity sold at high prices or its weight in gold. All this progress in the production of silk and its industry would not have existed if there were no intelligent systems and empirical strategies for dealing with silk as a national resource, for instance, working on the sustainable development of the silk sector in terms of production and processing. The ability to develop with the participation of the local community and the ability to preserve the confidences of silk in terms of source and stages of production for centuries in a way that did not restrict its local development and global marketing. The steps taken by China to preserve silk development and sustainability without revealing its secret for decades is one of the inputs that one can make use of in innovation and design, from the researcher's perspective. Therefore we have listed it in through five points as generally addressed by Priscilla Lowry (Lowry, 2008)

1. Silk culture¹⁵⁵: After the discovery of silk it acquired a special culture called (sericulture), it is related to all that promotes the

¹⁵⁵ "China is the home of sericulture. Chinese silk production, printing, dyeing and embroidery have a history that can be traced back some 7,000 years" **Invalid source specified**. "It was Emperor Chin Nong who first cultivated the mulberry tree in 2800 BC. But it was his successor Huan-ti, the legendary patron of agriculture, in 2602 BC, who recognized the value of sericulture as a means of contributing to the wealth of his nation and to the happiness of his people. So, with this in mind, he encouraged his young wife Si-Ling Chi to investigate silkworm rearing. The Chinese empress, as per her husband's wishes, attentively devoted herself to the endeavor. After observing the silkworm spinning fiber on the leaves of a white mulberry tree Si-Ling Chi had a large quantity of silkworms collected. She took a personal interest in raising them, reeling the silk thread and weaving it into cloth. Once she mastered the technique she demonstrated it to the court ladies. From this, the legendary imperial beginning the silk industry of China was born. It began with a woman and would continue to be the industry of women" **Invalid source specified**.

production of silk, its development, and manufacture, so it has become a fundamental component of the cultural civilization of China, particularly its economy. The culture of silk was patronized by the foremost authority in the Chinese Empire, it was considered one of the top secrets of the empire and is strongly protected by the court with its law and judicature and severe penalties are implemented to those who disclose the secret.

2. The secret of silk¹⁵⁶: Keep the discovery and the origin processing stages of silk confidential. The Chinese Empire has adopted two strategies. The first strategy is "no one should know or recognize the whole story of sericulture." Whereas, the second strategy is that "every stage of the sericulture must remain separate and isolated from the stage preceding or following it."
3. The cycle of silk¹⁵⁷: Each phase of the "sericulture" has its knowledge, arts, and regulations and it has become one of the most important fundamentals of the development of silk and its prosperity scientifically and practically in accordance with its above-mentioned secrets. Therefore, some local and rural Chinese communities have been lectured and trained as they need to be specialized in only one stage of sericulture, for instance, silkworm breeding, collecting cocoons and concealing them, transferring cocoons to other areas to boil them, so the silk threads can be extracted from, thereafter the silk threads must be wrapped in skeins and thereafter the silk shawls must be moved to other distant areas for dyeing and finally the silk shawls upon request are transferred to silk weaving centers before or after the dyeing process to silk weaving centers.

¹⁵⁶"Beyond the Great Wall (and even before its creation), Chinese silks meant luxury, warmth, and beauty to those from whom the method of their manufacture was kept a closely guarded secret" **Invalid source specified.** "The Chinese couldn't keep the secret of silk-making forever, and over time, sericulture spread to other lands. According to one legend, in 522 A.D., two monks hid silk moth eggs inside their walking sticks and smuggled them to Europe" **Invalid source specified.**

¹⁵⁷ "In Ancient China each province made its own kind of silk which was named in the honor of the province. However, the major advanced centers of sericulture in China were the lands lying along the Hwang Ho, the Chang Jiang and Sichuan province" **Invalid source specified.**

4. The luxury of silk¹⁵⁸: The Chinese Empire has made silk one of its most important cultural features, trademarks and substantive commodity for its superior attention to its secrets, stages of production and manufacture. For silk to remain a temptation for kings and the elites of society and an inspiration for poets as well as scholars, there has been a need to use the best types of silk to weave the best textiles through various techniques. Hence the finest types of silk used to be sent to secret workshops within the facilities of the Chinese empire in different provinces for silk weaving. Highly professional women worked in these workshops, and were supervised by experts who had exceptional knowledge of the secret skills and instructions of weaving the most beautiful and precious silk textiles, they inherited these techniques from their mothers, which made them highly appreciated by the Chinese Empire: The products of these workshops were dedicated to the apparel of the emperor, his entourage, senior officials and gifts to presidents, kings, and dignitaries from outside China.
5. Penalties of Silk¹⁵⁹: There has been thorough censorship in the Chinese Empire imposed on all who work in the sericulture system, those who either betray the secret of silk, attempt to pursue or disclose it are heavily fined, or face severe penalties which in some instances may be the death penalty.

¹⁵⁸ “Chinese silk technology and the exquisite products of generations of artisans are unique in Asia, and Chinese silk is much sought after by collectors of Chinese art throughout the world. Over the centuries, Chinese silk has had a profound worldwide effect on textile manufacture and constitutes one of China’s major contributions to human culture. Progress in pattern-weaving technology and the mechanization of the loom directly influence the variety of silk textiles as well as provide an indication of the level of textile technology at any point in history” **Invalid source specified**. By the Ming and Qing period, the art and technology of ancient Chinese sericulture and silk weaves had already been developing in continuous innovation for well over a thousand years, reaching a stage of maturity and excellence, and the silk industry flourished in an unprecedented manner, producing a rich variety of silk textiles of high quality... Ming and Qing textiles include mainly jin (brocade), duan (satin), ling (silk twill), luo and sha (silk gauzes), chou (plain silk weaves), kesi (cut silk tapestry), qirong zhiwn (silk weave with piles), and shuangceng zhiwu: (double-layered silk weaves) **Invalid source specified**.

¹⁵⁹ “When the Chinese discovered the secret to creating silk, they held the monopoly on silk production worldwide. The industry was such a boon to Chinese trade that an imperial decree was issued which condemned to death anyone who attempted to sneak silkworms or eggs out of the empire” (Tonkiss, 2014)

There is no doubt that China could not hide the secret of silk forever. However, the period of silk growth at its early stages requires intellectual studies from a design and innovation perspective, dating back to the period when silk was China's secret and continued to be so for centuries, so it is certain that throughout these centuries plenty of important information, smart decisions, and hidden techniques have been accumulated, especially if we bear in mind that making decisions concerning silk back then had to align with three important points: Sustainable development of the production and manufacture of silk, keenness on the confidentiality of silk, and first and foremost relying on women in the production of silk, setting its patterns and weaving it. Hence, the researcher believes that the activation of these three points by creative thinking and design and innovation based on what is mentioned earlier. It is not inconceivable to discover that the technique of Kesi existed before the birth of Christ and was a secret for silk growth because it dealt with art, design, luxury, beauty, precision, and meaning.

Wolfram Eberhard points out in his book, *A History of China*, that silk was used in daily life in the era of the Shang Dynasty (1600-1028) B.C. Then he adds:

The invention of sericulture must therefore have dated from very ancient times in China. It undoubtedly originated in the south of China, and at first not only the threads spun by the silkworm but those made by other caterpillars were also used. The remains of silk fabrics that have been found show already an advanced weaving technique. In addition to silk, various plant fibers, such as hemp, were in use. Woolen fabrics do not seem to have been yet used. (Eberhard, 1969, p. 20)

The second idea considers the Kesi technique as one of the Chinese innovations, which has been transferred to China and then developed gradually in line with the characteristics of silk, the dressing style in the society and the climate of the region. In debating over this idea, we take two things into consideration: first, not to restrict ourselves to silk as a material used in textiles; and secondly, not to make the development of silk the main drive for finding the technique and emergence of Kesi. Consequently, the proposition of the second idea is the complete opposite of the first idea. Therefore, minds will be

redirected from thinking of silk as an important element in the development of the Kesi technique into an element that seeks an advanced technique for silk weaving. Meaning that this idea should revolve around tapestry, the English term for the Kesi technique and how it reached China? One might ask oneself, whether there is new information that could be shared on this topic as this has already been discussed in previous research. Yes, most of the research discussed this, relying on the observations of Cammann about the origin of Kesi but did not thoroughly discuss other visions which depend on tapestry as a technique that created Kesi or other similar terms. There is strong evidence that proves tapestry was created before the discovery of silk or is as ancient as silk, but other materials were used such as linen and wool as W.G Thomson indicates in his book *A History of Tapestry*¹⁶⁰ to what supports that.

Of tapestry-weaving, almost as primitive, we find evidences of production in all parts of the globe, and amongst peoples so situated in relation to each other as to have no possibility of inter-communication. The ancient Egyptians, Peruvians, natives of Borneo, Greeks, Chinese and Romans are but a few who have left such evidences. (Thomson, 1906, p. 3)

Thus, the Tapestry technique is apparently too old and may be older than the discovery of silk, but the question that may come to mind regarding design and innovation is: Which of these oldest civilizations among the ones mentioned by Thomson first used tapestry? To answer this question, we have to look at what Luther Hooper said in his book, *Hand-loom weaving*, where he mentioned the following regarding the Origin of Tapestry-weaving¹⁶¹:

At any rate, whatever may have been its origin, there is now evidence that such work was done in great perfection as early as 1500 B.C. It was practiced as a traditional method for the ornamentation of woven materials in Egypt until the Ptolemaic period (b.c. 305), was continued through the Roman period and during the early centuries of the Christian era. The British

¹⁶⁰ <https://hdl.handle.net/2027/mdp.39015013270726>.

¹⁶¹ <https://hdl.handle.net/2027/hvd.hn21gz>.

Museum and the Victoria and Albert Museum at South Kensington are particularly rich in specimens of the Egypto-Roman work, but at present there are only three samples of ancient Egyptian weaving of this kind known to exist. These are in the museum at Cairo. They were found in 1893, in the tomb of Thothmes IV., who reigned in Egypt B.C. 1450. The smallest and oldest piece of the three has, worked into it, the cartouch of Amenhetep II., who reigned fifty years earlier than Thothmes IV. They are fine, delicate pieces of workmanship, and must be typical of the best textiles of that period (Hooper, 1920, p. 133)

What affirms that the ancient Egyptians are the inventors of the tapestry technique, is the research of the Egyptian archeologist Soud Maher Mohamed¹⁶² as she mentioned in her book "Islamic Arts" an extremely important issue, which is the Arabic term (al-Qubati) is one of the fabric types using tapestry, it is Egyptian by origin, ideology, and means, dating back to the Pharaonic era. Soud also notes that the Qabati textile is the oldest ornate textile, and it is the first attempt to get a textile ornament combined with two or more colors. Soud adds, the ornament is made on the fabric by using colorful horizontal fabric filaments which are not extended across the cloth width, so the ornamentation takes place in a specified space. Soud further states that Qabati textiles need a great deal of practical skill and technical competence. It is considered to be one of the textiles that cannot be mechanically manufactured¹⁶³. She emphasizes that what Hooper meant by al-Qubati is the Egyptian technique, which was found as colored ribbons with horizontal threads of different colors on the coffins of Mummies, then its work became very precise. But she points out an important issue that is when Hooper spoke about al-Qubati textile he mentioned that it is absolutely gorgeous and that some of these ornaments were added to the woven material during its weaving or

Soud Maher Mohamed is an Egyptian scholar who specialized in Islamic archeology. She was¹⁶² born in 1917. She graduated from the Faculty of Arts in 1946 and received her doctorate in Islamic Archeology from Cairo University in 1954. She passed away in 1996.

Exactly what the Chinese Kesi-Master said that, there are attempts to turn the kesi into a¹⁶³ mechanism, but this has failed and the quality deteriorated..

afterward by drawing, printing or needlepoint. Soud explained that she does not agree with Hooper, that some ornaments of al- Qubati textiles were added after the weaving was finished to fill in the gaps. She rather confirms that the ornaments were part of the technique of the weaved cloth because no matter how professional the worker is, as well as the added work, the needlepoint will never be free of flaws or errors. Soud also leans on Thomson's testament regarding the technique and texture of al Qubati which was also used in the weaving of paintings on the are hieroglyphic writings, as is the case for one of the Egyptian Museums in Cairo, which contains hieroglyphic writings. At first glance, it may appear as an embroidery technique, but in fact, it is woven with the tapestry technique, which was popular at that time. Soud concludes from her discoveries that "Al Qubati method was used in Egypt since the Pharaonic era and continued through its historical periods until it reached the Islamic era until the present day. This was implemented in the Pharaonic era in the same way it was in the Coptic and Islamic era". (Mohamed, 1986, pp. 75-83)

We infer from the second idea that Kesi and al-Qubati techniques may share a great technical resemblance. So, is there a direct or indirect historical relationship that dates back thousands of years?

To the knowledge of the researcher, there are no studies that link Kesi to the ancient Egyptian civilization, such as the link it has with the civilizations of Central Asia, although there are those who say that there are influences from ancient Egyptian civilization that indirectly reached China across Central Asia.

Since the 1990s, most Chinese archaeologists have accepted that much of the nation's Bronze Age technology came from regions outside of China. But it is not thought to have arrived directly from the Middle East in the course of an epic migration. The more prosaic consensus is that it was transmitted into China from Central Asia by a slow process of cultural exchange (trade, tribute, dowry) across the northern frontier, mediated by Eurasian steppe pastoralists who had contacts with indigenous groups in both regions (Ricardo Lewis, 2016)

All in all, the study is not about to discuss such complex issues. What the researcher wants to convey through the second idea is the following conclusion: If in the era of silk exploration (the first idea) China lived in an atmosphere of industrial and artisanal development more than any other nation at that time, it is likely that Kesi is a Chinese innovation. But if China back then was living among nations who were more advanced in industrial and artisanal development (Second idea) there is a chance that the Kesi technique was brought in and was somehow resettled in China. This is the presumption of the majority of the research and studies, the ancient and the modern as we mentioned earlier. We can compare the first and second ideas to crude oil today. So the first idea is similar to those countries which possess oil and deal with it in terms of 'oil-based innovation' which means that in addition to considering oil an important economic source for its country, these countries are also able to invent, manufacture and sell its techniques of instruments and equipment yet have considerable experience in supplying and establishing complex oil plants and building huge oil tankers, which makes the oil industry in these countries grow normally and work in parallel between oil as an economy and as an innovation.

B. The second idea

Serves as those countries which possess oil and deal with it in terms of 'oil-based economy' which means it is the main supplier for building its economy, just as silk for China back then. However, there is no doubt that these countries have history, civilization, culture and tradition, but they are not considered industrial states on an international scale. In other words, not like the states that fall into the category of the first idea, so their oil technique is mostly dependent on importing everything to do with the industrial oil system of machinery, equipment, factories, tankers, etc. Here oil is used within a pure economic vision and not an innovative one to be one of the leading countries in this. So, was silk in China back then used in accordance with the first or the second idea, or both? Considering that, the researcher excludes a third idea which is the possibility of cooperation between the Chinese textile sector during the period of keeping silk secrets and another fabric sector that possesses

an advanced technique outside of China. This matter would have disclosed china's silk secret at an early stage!

Through these two ideas the researcher wants to illustrate the significance of Ibn Khaldun's philosophy of history that depends on the importance of engaging history with the ideology of creators and project it on the reality in which we live and the future we look forward to, and that makes thinkers look upon culture and heritage as triggers for design and innovation aside from imitation and bragging. The famous Chinese architect Kenzo Tange has a say in this regard: "Tradition can, to be sure, participate in a creation, but it can no longer be creative itself." (www.azquotes.com, n.d.)

6.3.1.3. Crafts (aṣ-ṣanā'i)

From practice and business perspective, Kesi is today one of the productive traditional Chinese crafts, with high manual skills, by which pieces of cloth are being ornamented as the customer wishes, or art crafts and writings are being washed, using natural silk through simple steps and complex equipment. Suzhou is considered Kesi trade center in China and it is the only place that scientifically and practically preserves the skill of Kesi. Yet, Suzhou is staffed by Kesi's best products dealers and the best remaining factories to produce this kind of traditional fabric. Suzhou's Bureau of Culture identifies Kesi as the following:

Kesi employs a weaving method called "passing warp thread and cutting weft thread" (Unlike continuous weft brocade, each color in Kesi style is woven from a separate bobbin, making the method both technically demanding and time-consuming), in which the surface pattern of the fabric seems like having been carved by a knife, and then earns its name a "Kesi". Kesi is admired for its selected materials, gorgeous colors, and matchless workmanship. The tapestry is extremely detailed and exquisite, the pictorial designs of which are finely graded, taking on a three-dimensional appearance. Moreover, the pattern on Kesi fabric is identical when seen from its front and its back, making it a top art on

*par with Suzhou double-sided embroidery. At the same time, Kesi textile is able to withstand touch, scrape, and rub, far superior to other silk products in China. Kesi products are diversified, ranging from clothes, shoes and hats, ribbon bands and quilt covers in daily life to albums of paintings and calligraphy, vertical hanging scrolls, traditional paintings hanging in the middle of the main hall, etc.*¹⁶⁴. (Bureau of Culture, Broadcast and Publication of Suzhou, 2016)

In addition to what has been previously mentioned, the researcher considers Kesi more of an art and design than a hand luxury traditional weaving craft with a demanding technique and high skill. During weaving, Kesi products by the hands of women, one feels like the work they do is held within the art of multiple generations, and design of life full of experiences of the past, present interactions and future ambitions. When one sees the industry of Kesi, one will know that what has been said by Arab historians about China is fact and not fiction, of it is what Ibn al-Wardī¹⁶⁵ said:

¹⁶⁴ Further informative explanation "K'o-ssu (kesi) is woven in Ting-chou and large looms are not employed. A wooden frame is warped with colored threads and the design of flowers, grass, birds or animals is woven wherever required. When the weft is woven with a small bobbin, one for each color is assigned each to its own place. The design is executed with the warp and weft in various colours. Where the design ends, a narrow space appears around each mass of colour in the design, and it looks as if the design was carved in the pierced-work fashion; hence the name k'o-ssu (which literally means "carved thread"). So laborious is the work that if a woman's dress were to be made of tapestry, it would require the work of a whole year. In making the various flowers in the design, it does not matter even if they do not resemble the originals. In weaving the weft-threads the bobbin does not pass across the entire width of the fabric." **Invalid source specified.** "In other words, a shuttle with the desired color is woven back and forth in a given area of the design, another shuttle with another color in another area, and so forth. The wefts are usually beaten down with some kind of comb as the weaving progresses so that the warps are covered, and a slight ribbing in the warp direction (from top to bottom of the design in Chinese tapestries) is seen on the finished surface. Hatching or shading in tongues or strips occurs horizontally. Wefts from adjacent areas dovetail or interlock around a common warp at the edges of each color area. The slits in the warp direction that produce the "carved silk" effect occur where wefts from two different color areas meet; the wefts of one color turn back over one warp, those of the other color turn back in the opposite direction over the adjacent warp, instead of interlocking around a common warp. The areas irregularly striped or mottled in two colors represent no change in the regular weaving pattern; they result from the use of a thread made by twisting two contrasting colors together." **Invalid source specified.**

¹⁶⁵ Abū Ḥafs Zayn al-Dīn 'Umar ibn al-Muẓaffar Ibn al-Wardī (Arabic: عمر ابن مظفر ابن الوردی), known as Ibn al-Wardī, was an Arab historian (1291/1292)-(1348/1349), the author of *Kharīdat al-'Ajā'ib wa farīdat al-gha'rāib* ("The Pearl of wonders and the Uniqueness of strange things"), a geographical dissertation with sections on natural history.[1] He also wrote *Tarikh Ibn al-Wardī* ("The History by Ibn al-Wardī"). **Invalid source specified.**

"The people of China are the best people at industries, engravings and photography. One does sculpturing and photography by hand what many fail to do. It was a habit of their kings, when they hear about an engraver or a photographer in their country, they used to send a delegate with money and a stimulus for responding, if he comes he was promised money and status and ordered to make a sculpture of what he knows of engraving and photography. He was expected to give the work all his heart and bring it to the king, when that is done, the work will be hung by the door of the king's mansion for one year, if nobody pointed out to a defect or dysfunction in the work, the craftsman used to be praised, as one of the distinguished craftsmen in the house of industry and was given the money and status he was promised"¹⁶⁶. (al-Wardi, 2008, p. 129)

This precise description of Ibn al-Wardi was almost 600 years ago. The researcher would not have understood the content of this accurate technical description without the exploratory study carried out by the Suzhou Western Folk Silk Embroidery Factory¹⁶⁷, which is truly one of the best 'industries, engravings and photographs' which allow the connoisseur of culture and heritage to comprehend the essence of history and its significance when related to the reality of societies and their lives as Ibn Khaldun said: Not only that, but the connoisseur can foster history and affect its culture and heritage to make them drive for creativity, innovation, and design. After the close participation of the researcher in how to design, manufacture, sell, maintain and develop Kesi traditional textiles, he could understand why Ibn al-Wardi praised the technical

¹⁶⁶ Arabic text:

"وأهل الصين.. أحقق الناس في الصناعات والنقوش والتصوير. وإن الواحد منهم ليعمل بيده من النقش والتصوير ما يعجز عنه أهل الأرض، وكان من عادات ملوكهم أن الملك منهم إذا سمع بنقاش أو مصور في أقطار بلاده أرسل إليه (مندوب) ومال ورغبة في (الحضور) إليه، فإذا حضر عنده، (وعده بالمال والمكانة) وأمره أن يصنع تمثالاً مما يعلمه من النقش والتصوير، ويبذل في ذلك غاية جهده ومقدرته ويحضر به إليه، فإذا فعل وأحضره علق ذلك الصنع والتمثال بباب قصر الملك وتركه سنة كاملة، والناس يهرعون إليه في تلك المدة، فإذا مضت السنة ولم يظهر أحد من الناس على عيب به وخلل في صنعه، أحضر ذلك الصانع (وأكرمه) وجعله من خواص الصنائع في دار الصناعة، (واعطاه) ما وعده به من المال". (al-Wardi, 2008, p. 129) (والمكانة).

¹⁶⁷ Suzhou Western Folk Silk Embroidery Factory was founded by Kesi master, Wu Wenkang.

abilities of the Chinese, as they are based on many cultural values, four of which are related to Kesi:

A. Patience and taking responsibility

Motives of patience vary among people and communities. Encouraging patience is one of the optimal values called for by all religions and beliefs. So, we are talking about a traditional Chinese craft which would have not existed without patience. Today in the textile world, we have the best alternative techniques for weary traditional handiwork. There are statistics suggesting that there are numerous methods for mechanical embroidery and similar textile techniques. However, these great technological advances in spinning and weaving could not divert Kesi as a craft, it is still ongoing. Knowing that the manual stages of Kesi processing are not easy, since Kesi is full of technical complexities and mentally draining. It also takes a long time to accomplish a few meters of thousands using incredibly precise machines. But with these complexities, hard work and time for progress, there is still demand it, even though there has been a decline ,as previously noted, history proves the durability of Kesi since it first started until the present day. Some skilled craftsmen (Kesi Master) like Wu Wenkang are committed in continuing to follow the manual Kesi technique since they do not trust the imitation technical outputs of Kesi, as they believe that the mechanical attempts of Kesi products still did not live up to the expected level of beauty or quality that the connoisseurs have known this type of fabric for. In other words, today's technology still did not understand the core of Kesi, therefore it is righteous of Kesi, not to leave this handicraft behind and give up on following its authentic producing steps, so that it will not be distorted by the new technique as it carries values and secrets of art, culture and civilization that dates back to tens of centuries. In this context, patience shows man's true colors, as Kesi requires patience. Philosopher Confucius, considered as one of the wise Chinese people once said: "To be patient even when others do not understand—is this not the mark of the gentleman?" (Slingerland., 2003) As if Confucius wisdom indicates the importance of having patient hard workers, who

are keen on keeping tacit knowledge so that it will not die or get distorted and implant it in man(Chinese) to last across generations. According to plenty of wise men, in order for this knowledge and others to remain effective, it is necessary to learn its basics, then discuss it and bring others to it, and then master its arts and ideas, and finally ensuring that others learn what has been patiently mastered even if it was difficult for others to comprehend.

B. Precision and exquisite work

There are four steps which summarize the stages of Kesi tapestries: The first step is to tighten silk yarns (warp) on a wooden loom and the color of these strings is normally white, this step consists of many other sub steps known to professionals. The second step is using a pen to draw patterns over the surface of silk yarns facing the weaver. Since grasping the pattern is important, weavers use a paper sample which exactly matches the full details of the pattern and this is put under silk yarns. The third step is knitting by using colorful silk threads (weft) in accordance with spinning and filling in the patterns, that means these yarns are not continuous from one end of the piece to be woven to the other, they are discontinuous and vary depending on the need of enhancing the pattern. The fourth and final step is to trim the other side of the woven work. Trimming has several methods known by craftsmen and practitioners and there are also those who innovate it. The aim of trimming is to tighten the consistency of the woven piece and to show its patterns on the other side with the same quality of the first one. The third and fourth steps are the base of the technique Kesi is distinguished for, in English it is called tapestry. These steps determine the precision, quality and beauty of Kesi outputs. The steps are difficult to follow hence we set patience as a priority, because without patience you cannot enroll in Kesi and there will not be precision, proficiency and time handling. Patience in a craft like Kesi emerges from feeling the importance of strengthening connections between culture and heritage values and the significance of discovering silk and its lengthy history and also between tasting art and feeling the beauty. These factors are what make humans

more precise and subtle in implementing their works, aside from mixing between aims and tools. In this context, Confucius says: “When we say, ‘the rites, the rites,’ are we speaking merely of jade and silk? When we say, ‘music, music,’ are we speaking merely of bells and ums?”[47] Confucius emphasizes here that values within the culture and heritage of nations are aimed at uplifting the self as well as the community, so whatever the price of the material is, it is only a tool to reach this end and emphasize the importance of those values. As is the case with music, its goal is harmony, therefore everything related to music such as tools and equipment has to be leveraged as a way for achieving this harmony.

C. Happiness and transferring it to the producer

It is interesting when you see manual work as difficult as Kesi and noticing that the workers involved are happy and committed to their laborious responsibilities and that there is a constant smile mixed with seriousness on their faces. At this point we know that happiness is not seeking comfort and money but might be spread between people through their mutual desires, sensations and feelings no matter how difficult the circumstance, as long as there is a great bond between people, which is the goodness of giving and taking based on patience and proficiency as we mentioned earlier. Confucius also says to the people of China: Without goodness, one cannot remain constant in adversity and cannot enjoy enduring happiness. Those who are good feel at home in goodness, whereas those who are clever follow goodness because they feel that they will profit from it.” (Slingerland., 2003) The researcher believes as a designer that the laborious work that the weavers of Kesi bear and the artistic sense that they enjoy, for them is not only a job or a task or even a source of money. It is the desire they have to embellish their happiness with silk threads through the unique skill they have, on the cloth they are weaving. So, we can describe the Kesi community as an ideal and gratifying system of those who are able to understand it. The mentor, his wife and the female staff who are weaving all consider Kesi a source of creativity, that connects the

feelings to the properties of the material and the value of the product, which we have already discussed. As for clients and customers who still experience and respect the manual capacity of Kesi, their respect stems from the respect Kesi offers to them by weaving their design and patterns of art like drawings, writings and pictures, and also respecting them because it considers their emotions and values their feelings through the maintenance of their old belongings, of which modern technical products are meant for consumption and not for interacting with emotions and sensations.

D. Originality and trademark

What distinguishes the craft and products of Kesi as a brand name is its originality that is built on two rules, a referential rule which means correlating its techniques with the respect of beliefs, values and cultures. Interactive rule, by linking its products with creativity in its forms, art and design and innovation. Both rules were proven by history and by Kesi products through generations. Therefore, Kesi as a brand name is capable of growing, progressing and competing for possessing such rules. The referential rule serves as a guide for all who wholeheartedly want to practice this craft and abide by its quality controls. Since the business ideology which is based on materialistic gains does not work with this craft, however, the interactive rule is like a changeable ideological guide that interacts with creative age data and its need of innovation and design, this stems from the ability of Kesi and its products that could be among many technical and functional products. There is no doubt that with their advancement of communities, there will always be connoisseurs for heritage such as textiles and embroideries. And people's tastes of heritage vary and have multiple values meanings. It may be associated with deep feelings towards the past or artistic values or certain knowledge, etc. Therefore, many love to possess Kesi products and that is due to the consideration that it is the essence of the Chinese silk art, and it is able to weave fabrics that match the customer's requirements using simple equipment but with great and complex skill not which only people who are patient, precise and happy in

implementing their work. Kesi as a craft and precious product can be competitive in many areas of which are philosophy of fashion, manufacture of clothing, accessories and household furniture and also stimulating artworks such as graphics and images. Also, Apple's writings may be used in many products as well as in improving ideological and manual skills. Philosopher Confucius created an appealing link between the modern thing that branches from the old inconsistency with values and traditions, where he says: "A ceremonial cap made of linen is prescribed by the rites, but these days people use silk. This is frugal, and I follow the majority. (Slingerland., 2003) This wisdom explains that the established social attributes may naturally progress from being traditional to another new position for one reason or another as long as this development or renovation or innovation does not affect the value system or distorts the good ideals in customs and traditions. Therefore, in order for Kesi to interact with the new era which surrounds it in particular with what is today's 'social innovation' as it became necessary for professionals, workers and craftsmen in Kesi to expand their communication with society to spread the capabilities of this ancient craft technically and artistically to the new generation. If that happened, Kesi would be able to persist as a competitive trademark, and be inspiring to many social innovations. We will get into this topic later by Kesi Gallery in the school of design at Hong Kong Polytechnic University.

At the end of this topic, we can say that we are facing a case of Chinese heritage from which we can learn so much from in multiple areas. So, it is naïve for graduate students discussing such topics of heritage superficially, or without a philosophical depth based on the depth of art and design on one hand, and the depth of creativity and innovation generated by values and culture on the other. Consequently, it is clear from the above four data that Kesi would not persist through history or the succession of generations because it is an expensive cloth, yet because it is a piece of values, culture, and an art-filled with meanings and feelings reflected by people's lives. The ornaments and pictures in Kesi tapestry are not just decorative and aesthetic, but feelings and

sensations transmitted from dreamy individuals to be weaved for them by other skilled individuals, what lies within them is much greater than what lies in us.

6.3.1.4. Knowledge (al-'ilm)

Regardless of the controversy concerning where and when Kesi emerged, and the origin of its technique. It is considered one of the components of the Chinese heritage, and it would not have reached this level of technology and beauty without the Chinese taking care of it. It is one of the finest ornate Silk weaving that is illustrated manually and its technique is the most precise, elegant and less expensive. Hence Kesi is able to satisfy customer requirements and the designers who wish to produce fabric upon request that have certain ornaments and **textures of a model**, to be used in fashions, furnishings and products which require the finest texture. It is also capable of weaving works of art like photocopies, graphics, writings, within a highly visual, precise and professional environment allowing connoisseurs to feel works of art through flexibility and elegance and luxury of silk. It is a non-traditional visual connection that on one hand combines the artistic and ideological value of the work, as well as the creative and innovative value of the technique on the other. So, it is no surprise that Kesi's crafts and products are associated with numerous mottos, for example: "one inch of Kesi equals one ounce of gold; Kesi is the treasure of Oriental art; Kesi is the dignity of woven textile; Kesi is the holy art of silk..." Also, it is important to point out that Kesi nowadays has expert mentors (masters) and skilled artisans (weavers) who are making an effort in keeping this traditional craft alive so that it is passed on through generations, they constantly upgrade it to make it more interactive with its era, to keep up with the age of knowledge, innovation and design. We will review some studies to prove the importance of Kesi as a knowledge that goes along with the tendencies of our current age towards creative thinking and design as previously mentioned. But before we review the studies, we must point out three important matters about the craft and products of Kesi, which are:

A. The first matter

Silk has many names that are related to the languages of different communities, therefore as researchers and graduate students we should take this issue into account in order to reach for the right information and stick to academic honesty towards it. For example, Priscilla Lowry mentions in her book "Silk": From the Myths and the Legends to the middle ages that:

Every country has its own word for silk: The Chinese call it Si, South China used See or Szu, the Koreans Soi, and the nomads of Central Asia called it Sir, Sirghe or Sirkek. The Jews sometimes call their exquisite silk fabric Sherikoth, while the Arabs called it Saraqa. In the west the Latin texts use Sericum, French Soie, German Seide and English Silk.
(Lowry, 2008, p. 28)

So, the name (Saraqa) that was used by the author is not the original and historical name for silk that is religiously, culturally and economically known in the Arab speaking communities. The original term is (hareer) or (al-hareer) and it is vitally important to researchers, yet it is the base on which scientific and practical knowledge of silk is built according to Muslims and Arabs. This term is included within texts of the most significant religious source to Muslims which is (Holy Quran) and the most important source of values, ethics and ideals, which is the honorable Prophet Traditions on which important Islamic terms and concepts are based as reviewed earlier.

B. The second matter

Researchers and graduate students should also explain that her(Lowry) Kesi has at least three writing styles: 1) Chinese characters (縐絲) are the original word in Chinese. 2) English word (k'o-ssu) is written by romanization and Wade-Giles which is the word that we can find in old English research. 3) English word (Kesi) is a writing style that conforms to the spelling of Chinese symbols in (1) and it is the English style that is common today in all writings.

C. The Third matter

All the three above mentioned names, somehow revolve around the Chinese term. This does not mean there are no other names for (Kesi) in the languages of other communities as is the case with the word (silk). The researcher finds that there is a lack of research and studies regarding the exploration of the term or terms for Kesi in Arabic language, which makes it unpopular in Arab countries, especially in scientific studies and fields of art and design, as we will see none of the postgraduate modules contain contrary information. Knowing that Islamic history and civilization proves that Arabs before and after Islam knew silk very well, so they created and used many terms for textiles, whether it is pure silk or mixed silk or free of silk. As these terms were so precise they used to consider the techniques used in the textile as well as its shape and thickness, indicating that the term was originally in Arabic or rather it is Arabized¹⁶⁸. So Kesi textiles were surely known to Arabs with a special Arabic term back then, that needs to be explored. The best proof of that is what we have referred to and is mentioned in the Quran about silk, and also what we referred to concerning the commercial communication between Arabs and China which existed before Islam, until Islam emerged and reinforced this communication during the Tang dynasty (618-907).

The three above mentioned issues are fundamentals for building a knowledge network that highlights the value of Kesi craft as an art and design dealing with natural silk textiles which is dependent on a production line limited in quantity with artistic styles for customers, some of it is used as a cloth for clothing and furniture designs and some of it is drawings or writings to highlight it as paintings or artwork. It is no doubt that reviving Kesi as an art and design will globally add a value to it over being a kind of Chinese tapestry techniques which will give it strong presence in the ideologies of creators, innovators and designers, so they benefit from the practical skills of the mentors (masters) and weavers

¹⁶⁸ To check this, one should refer to the Arabic language dictionaries in textiles and clothing, for example, "Glossary of Arabic clothing names" and "Arabic dictionary of clothing names"

and what they possess of aspects of explicit knowledge (explicit) and implicit knowledge (tacit) of Kesi, some of which we discussed in the previous topic.

We will review some studies that demonstrate the importance of Kesi as cultural and heritage knowledge, which we can make use of in our time as a motive for thinking outside the box to gain access for new ideas in many areas, mainly art, design, innovation and entrepreneurship:

The First study: Kesi activation as a catalyst for innovation. Researcher Fawaz Bakhotmah highlighted the importance of heritage and culture in building relationships founded on innovation between countries that have historic and cultural depth, so these countries will not only rely on their traditional political interests and economic exchanges. The researcher exemplified Saudi Arabia and China as they both have a deep-rooted civilization, since Saudi Arabia represents the Arab Islamic civilization, and China represents the silk line. In order for the researcher to clarify his idea he chose Kesi craft as a point of reference as he said:

“Designers and entrepreneurs in (Saudi Arabia and China)(need) to include their respective histories as an active incentive to develop more creative partnerships from the perspective of design and innovation... (Kesi) will lead young designers and entrepreneurs to take into account the importance of handicrafts and traditional industries in recent interactive design systems for creative ideas and brands... (Kesi) which is considered one of the most creative and innovative craftworks in the world. (E.g.) In China, one inch of Kesi silk is considered to be equal to one ounce of gold... we need to deal with the handicraft parallel with the globalization market in order to reach beyond the borders of its origin, increase the opportunities for its use, and connect its artisans with the young generation of designers, innovators and entrepreneurs to benefit from their experience and

collaboratively discover new creative approaches.”

(Bakhotmah, 2013)

In this sense, Bakhotmah intended to review Kesi by design thinking to prove the importance of the idea that he presented and which can be a model for establishing cultural and heritage partnerships that do not undermine values and norms. Of the intellectual approaches we reviewed: first, the importance of preparing answers to four questions, which are: 1. Under the cognitive development and technology revolution, how are we supposed to handle Kesi through its huge artisanal and technical potentials of fostering the fields of art, design and innovation and not just the trade sector which is based on textiles? 2. What production philosophy must Kesi have to be preserved as a legacy and as an electronic, informative or technological evolution? 3. Should Kesi techniques remain local or can they be made global by sharing them with other arts? 4. What are the suitable methodologies that should be used to scientifically and technically transfer the legacy of Kesi to a proportion of people across generations? Secondly, the importance of taking advantage of some concrete examples that have to do with development and advancement without it negatively affecting or distorting the content of culture or stopping the durability of heritage as functional or technical data, on the contrary, development and advancement in this case will serve as a means and not as an aim in achieving heritage and cultural goals that keep up with the age. This applies to (Kesi) as it developed to become one of the most essential components of the Chinese ideology, and it lived up to be a center of attention and appreciation of the highest cultural levels. An example of development and advancement that Bakhotmah also used is the profession of architecture, where the idea of the architectural drawing panel has developed into a collection of the most important design programs. The output of architectural projects has developed to become projects that take into consideration the precise requirements of modern society without changing the content and goals of the successful architectural design.

The second study; Dealing with Kesi as an artistic philosophy: The Researcher Alexana Tunstall conducted a doctoral study about Kesi where the objective of the study is:

to reclaim the position of Kesi in relation to the history of Chinese painting and calligraphy and to give to the study of these arts a dimension that is absent when they are studied in isolation. (Tunstall, 2015, p. 159)

The thesis is considered a good and modern study which almost proves a complete and useful idea for those who wish to learn about the craft of Kesi, considering its emergence, technique and the philosophy of using it as an artistic palette that contains photocopies, drawings and woven writings. The thesis views Kesi as a technique imported from outside China, mainly due to the great demand for silk textiles which were the center of producing it back then, and it lasted for many centuries. Tunstall states that using Kesi as an art to create or copy artwork of the elite artists' calligraphers through spinning has notably developed in China and became an important part of the Chinese culture across history. Tunstall emphasizes several important issues that the Kesi weavers combined between historical knowledge and artistic knowledge through the models of arts and writing which they have copied from the elite works and put in an artistic community different from the original. This would not have succeeded without them understanding the visual language of painting and ultimately improve on it to fit with a new area of art which is the visual connection through the technique of weaving silk. She adds that the historical knowledge of art by professional weavers competed with the expertise of writers and intellectuals, and that there is no way to prove that but by exploring their works through their textiles as it were the only thing they left behind. In addition to their culture, they had knowledge of the art of painting with a brush with rules and font patterns related to it. They also acquired aesthetic values from constant practice, which gave them insight into the world of high culture within their surroundings, demonstrated by the precision of their work in many paintings, which depend on blending colors and the transition between them to create different visual effects. From the researcher's perspective, this means that the weavers make use of their thorough knowledge of textile techniques to solve problems they face while implementing their works of art. Tunstall recommends by the conclusion of her thesis to explore Kesi and its precise relationship with painting and calligraphy, and how it evolved to become among

the finest art which contributed to the reinforcement of visual culture in the history of art in China.

The third study; The importance of identifying Kesi: Researcher Tahani Klktawi conducted a master's study based on the art of Visual communication through linking the diversity of landscapes in Saudi Arabia and weaving it to become among paintings or innovative art palettes. The researcher's aim of this study is: to create a new aesthetic dimension through the creation of visual works of art dependent on artistic and functional correspondence between both: Barbizon School as an art that paves the way for many entry points to select landscapes from the distinguished nature of Saudi Arabia, and tapestry fabric as a technique that has the ability to weave landscapes with precision and quality. Klktawi describes the importance of her study as supporting nationalism and promoting the use of the heritage of manual weaving in the development of creative thinking, in order to produce innovative art products that lead the community towards a further artistic sense and the ability to appreciate it.

This research affirms the importance of making use of the old textile techniques which still utilize the same traditional methods, as well as adding the capabilities and modern techniques to enrich their looks, and directing them to a new field founded on using works of textile as posters and murals. The study depends on drawing formation components from the nature of realm and reshape it in accordance with the modern weaving technique, which one can make use of and which is founded on the appreciation of nature and manifesting reality. One of its most important elements is shadow, light, texture and color. The method of 'Tapestry ' is one of the most significant methods used in the past to record the slight details, with adding different shapes to modern materials that enrich the woven work. (Klktawi, 2008, p. 7)

What the researcher wants to focus on is the good cognitive background that Klktawi used for tapestry textiles. As indicated, this type of textile has links with different cultures. Arabs called it (Al-Qubati¹⁶⁹), while Europeans called it (

¹⁶⁹ See the history of this case study.

Gobelin¹⁷⁰), in Persian it is referred to as (Kilim¹⁷¹), it also indicated that that central Asians call it (Giylam¹⁷²) but with this new background, the researcher did not address Kesi as an important manual heritage craft that has to do with the research methodology of her thesis. This note is not only meant for this study, as the researcher spotted it in many similar Arab studies models. This affirms the significance of taking the third case to which we indicated earlier. Muslims and Arabs have a long history with textiles as design, manufacture and trade. So, it is of historical, cultural and economic use to scientifically and practically exchange the ideology of Kesi between China and Arab countries, particularly the rich Arabian Gulf Countries , as they have good taste in picking out exquisite and costly textiles for wedding apparel, furnishings and home decorations. Moreover, a country like Saudi Arabia has colleges exclusively for women, such as the college of domestic science, which usually have fashion and weaving departments. These colleges have distinguished members and students with great potential in creativity and innovation.

6.3.1.5. Urban-Style (al-'umrān)

Province Jiangsu is considered the silk area in China and its production Center has situated in Suzhou city since the Tang dynasty, which represents the beating heart of silk trade and its prosperity. It is most famous for its ancient techniques and the headquarters for the key craftsmen who contributed to the most favorable clothing textiles for kings, nobility and the ruling classes as well as the most valuable silk gifts. The reputation of Jiangsu in general and Suzhou in particular still endures to this day even after centuries, all thanks to interest in urban development that is based on the importance of the history of silk and future aspirations regarding it, in order for this area to be an international focal point of silk, and a significant reference for the cognitive content of silk, it is also the headquarters of the best local and global expertise that specialize in the production and manufacturing of silk. What is important about this development is the

¹⁷⁰The Gobelins Manufactory (French: Manufacture des Gobelins) is a historic tapestry factory in Paris, France.**Invalid source specified.**

¹⁷¹ A flat tapestry-woven carpet or rug traditionally produced in countries of the former Ottoman Empire, Iran, Azerbaijan and Turkic countries of Central Asia. Kilims can be purely decorative or can function as prayer rugs.**Invalid source specified.**

¹⁷² No information, need more investigation.

Suzhou International Silk Festival ¹⁷³, which consists of a series of celebrations and special events, such as commercial conversations and economic deals concerning silk. In addition to Silk Suzhou¹⁷⁴ there is the annual global Gallery that began in 2016 where it became of high demand and universal fame during a short period of time. We should also bear in mind that wedding dresses and their various designs now consider Suzhou as their center, since statistics indicate that 80% of wedding dresses in the world are manufactured in Suzhou. (BBC TRAVEL, n.d.) Today Suzhou has become a construction, since becoming popularized by silk, it is considered an attractive living environment, because it makes its residents feel that it is a distinguished cultural model. It combines heritage with all its functional and aesthetic components, manifested in its famous gardens from which craftsmen, artists and designers take inspiration for their ideas in the ancient and modern days. It is also distinguished by its historical markets, as well as its alleys and old houses on the river banks which are still full of traditional vehicles. That is an appealing manifestation of the old days. Suzhou nowadays enjoys an advanced economic status and a place to attract investment due to its closeness to the economic capital of China, Shanghai and also because of the partnership project between China and Singapore, named Suzhou Industrial Park¹⁷⁵. As our case is the impact of culture and heritage on development and civilization of the place (al-'umrān), we will review how silk development as the most important cultural and heritage datum of the area, affected the process of reconstructing Suzhou city in the

¹⁷³ Or “Suzhou Silk Tourist Festival” held every two years from September 25 to October 20. Suzhou Silk Tourist Festival and Tourism Month activities is organized by the National Textile Association and Suzhou Municipal People's Government. **Invalid source specified.** It is a platform for promoting international silk trade fair. Aiming to attract more investors and businessmen in the silk industry, Suzhou will hold temple fairs, cultural and art festivals, silk garments exhibitions, fashion performances accompanied by the notable symphony orchestra, and activities that are linked with the theme of silk are held annual to attract people from all over the world. Some famous scenic spots in Suzhou are also highlighted during the festival. **Invalid source specified.**

¹⁷⁴ an exhibition all about silk. It is highly specialized and highly market-oriented. It is the only large-scale silk exhibition in China. It attracts silk companies and designers who love silk from all over the world, especially from Japan and ASEAN countries.

¹⁷⁵ A flagship cooperation project between Chinese and Singapore governments. SIP covers a total jurisdiction area of 288 sq km, among which 80 sq km area belongs to China-Singapore Cooperative Zone. SIP goals are: 1) To develop into a hi-tech industrial park with international competitiveness. 2) To develop into an innovation eco-township of internationalized, modernized, information-based happy district of Suzhou. **Invalid source specified.**

modern day, as the effect of nature and beauty that distinguishes Suzhou designs on the designs and ornaments of silk products through history:

A. Sericulture

Maintaining the life cycle of silk (sericulture) is one of the most important factors that made China the main producer of silk throughout history, and that is the developmental ideology that revolves around this national source. In ancient times when silk was first discovered, the developmental ideology was apparently all about making the production one of the country's secrets but at the same time consider it an important product of its economy. **That was the reason behind the tendency of silk producing techniques, to focus on the splendor of the functional material over the beauty of the art patterns.** After discovering the secret of silk, its development seemed to require improvement and innovation and that created weaving and embroidery techniques with high fidelity, it combines functional value and artistic value, to attract people to the Chinese silk products and compete with other silk markets outside of China. However, in the first trimester of the twentieth century as China converted from the imperial regime to the Republican and a new pattern started taking over, in terms of agglomeration, forces and wars, there apparently had to be a way to maintain the developmental capabilities of Chinese silk historically, culturally, heritage- based and technically. So, in 1926 the first silk factory(No.1 Silk factory) was created in Suzhou, it was a new developmental idea to document the life cycle of silk in one place as a production and technique and manufacture in order not to be wiped out because of the fluctuations of internal and external affairs. This plant is considered the most realistic interactive **feature** in China that maintains the ideology of silk development historically, scientifically and practically through the stages of silk production(sericulture) as was through the history of China and the way of incorporating some modern methods at this stage that corresponds with development and advancement. Also, there is a wide range of equipment, techniques and silk products in the galleries of the plant as well as traditional Chinese apparel and modern

outfits, all made of silk. In short, this plant is considered a cognitive, cultural and thorough interactive project of silk and landmarks are known worldwide.

B. Competencies for Silk

Generates aesthete competencies for silk which is capable of innovation, since China began to witness a major shift towards production and mechanical manufacturing, so there have to be institutes and colleges to create generations who ensure the durability of the distinctive heritage products of China, of which that is Suzhou Embroidery Research Institute, established in 1957 it combines a vast amount of experience and qualified craftsmen, artists and people who are qualified in silk, and particularly embroidery. Where through them many high-quality silk embroideries with beautiful patterns, elegant colors, rich and precise stitching, and indistinguishable from paintings only upon closer inspection can one distinguish embroidery from painting. This research center is distinguished for its location which is a beautiful place called the Mountain Villa of Secluded Beauty, a famous garden in Suzhou, which was built in the Qing Dynasty. The center trained many on embroidery and their works have been exhibited in many countries, it is also the recipient of numerous awards and multiple of the most prestigious official gifts presented to heads of states. It is important to note that China has numerous associations and institutes for silk, for instance including, but not limited to China Silk Association, Jiangsu Province Silk Association, Suzhou Silk Industry Association, and Suzhou Artware * Silk Co., Ltd.

C. Documentation of Silk

Thirdly, the silk documentation activates the role of the community and interested people towards it. Hence, it became necessary for Suzhou to sustain its long journey of silk with a documentary, enlightening and sociable methodology, therefore the Suzhou Silk Museum¹⁷⁶ was

¹⁷⁶ Suzhou Silk Museum is the non-heritage inheritance base of the traditional silk weaving skills of Brocades in Song Dynasty and Brocades in Zhangzhou. Besides, it has made great achievements in silk relics reproduction and restoration. Suzhou Silk Museum is the first professional silk museum in

inaugurated in 1991 for those who want to trace the history of silk in China till our present day, expressing how silk was one of the key components that contributed to Chinese civilization through the ages by displaying all connections to the cultivation across centuries by displaying everything to do with silk such as agriculture, production of silk and its weaving technique. The Museum does not only display but also interacts with the community by offering specialized seminars and training courses as well as conducting scientific research and participating in academic activities. This museum is within a system of museums that Suzhou is overflowed with, notably Suzhou Museum designed by architect I.M. Pei. All these museums give value to the region and the impression that this region of China has a superior heritage-based art, and an incredibly precise artisanal skill, and most importantly aforethought consolidation functionally and aesthetically between Nature and human thought.

D. Knowledge-based Economy and Silk

Fourthly, the economy of knowledge and the future of silk with the technique. Because silk entered a new phase under knowledge and rapid technology, therefore it is no longer sufficient to look at it as history, culture and civilization, or as a production, manufacture and traditional trade. Therefore the progress and development currently experienced by China became a necessity in dealing with silk as a science and knowledge that can partake in multiple areas. This has prompted Soochow university to create Textile and Clothing Engineering¹⁷⁷ works

China, and covering an area of 9,500 square meters with 4,000-square-meter display area. It houses five major exhibitions in History Hall, Modern Hall, Science Hall for Children, Sangzi (mulberry tree and catalpa tree) Park and Silk Textile Machinery Showroom, among which, the History Hall consists of six parts, namely, Ancient Hall, Cansang (silkworm and mulberry leaves) House, Weaving and Dyeing House, Tribute Weaving House, The Republic of China Street and Non-heritage Hall. In the Museum, you can see not only fine silk relics display and dynamic demonstrations of mulberry tree planting and silkworm rearing, but also demonstrations of traditional looms operation and the application of modern silk weaving technologies in life (Suzhou Municipal Government Portal Management Center, 2016).

¹⁷⁷ "The history of College of Textile and Clothing Engineering (CTCE) can be traced back to "private women's sericulture school" built by the famous patriotic gentleman Mr. Shi Liangcai in 1903, Shanghai. On the basis of the original department of silk science, department of dyeing and finishing and silk research institute, it developed into College of Textile and Clothing Engineering. CTCE has won high reputation and awareness at home and abroad due to its profound cultural background." (College of Textile and Clothing Engineering, n.d.)

through a leading program on a global level regarding teaching students and producing new theses in the field of silk with its techniques and uses. In another leading step towards dealing with silk such as advanced technical research, a center for textile and silk was established in the Technology Research Institute in Jiangsu (JITRI)¹⁷⁸. One of the search fields in the center is Silk biological engineering and its comprehensive utilization.

The researcher finds that the four above mentioned points are among the most important factors for silk development, as numerous concepts are built upon it to reconstruct Suzhou's identity which clearly combines the past, present and future, allowing the emergence of innovative visions on all above-mentioned levels. In fact, silk as an agricultural, productive and economic concept still receives attention and care until today. This is proved by the No.1 Silk Factory. Silk as a concept for weaving and spinning and manufacturing luxurious silk garments is still practiced using manual techniques with high technical skills and values of beauty and quality. That is proven by Suzhou Embroidery Research Institute and many other factories and workshops where professional weavers use traditional looms, similar to those used in the olden days. Of these factories is Western Suzhou Folk Silk Factory which belongs to the master Wu Wenkang. He is one of the few professionals and specialists of Kesi, the researcher had the privilege of interviewing him, this interview will be reviewed later on in this thesis. Silk as a cognitive content for activating many segments of the society of those who are interested as well as students, artists, designers and entrepreneurs, will be achieved through the available and rekindled knowledge of the exhibitions, programs and activities of Suzhou Silk Museum. However, if we are to consider silk either as a future dependent on science, engineering, medicine, and technical innovation, we will find it in the programs of universities, research centers and graduate studies. It is no surprise that sooner or later, we will see through scientific and research programs new explorations of silk in the fields of medicine, psychology and chemistry, digital

¹⁷⁸ "Institute of Textile and Silk became a member institute of JITRI in January 2014. It established an independent legal entity named Nantong Textile and Silk Industrial Technology Research Institute in April 2015, which was supported by Soochow University and Nantong Bureau of Science and Technology." (Jiangsu Industrial Technology Research Institute (JITRI), n.d.)

weaving, construction etc. Such innovations take us back four hundred years ago when Islam valued silk in the Quran and described it as the apparel of the people of paradise as mentioned earlier, so what is the wisdom behind that? Is there an implication for other things more complex and advanced that we will be exploring later about the silk valued by Allah? When Islam forbade Muslim men from wearing silk garments in the present life, yet permits them to do so to remedy or cure medical conditions such as some skin diseases, what are the dimensions of that scientifically? It is no doubt that these questions and many others will enable researchers in the age of silk and knowledge to find a great interaction between religion and science, As well as between man and urban.

6.3.1.6. Life-Style (al-ḥaḍāra)

Based on the three cultural levels that the researcher concluded from the philosophy of Ibn Khaldun as a methodology to assess the outputs of a certain issue as it revolves around a cultural content whether it is positive, minor or negative, and to link this content by religious, historical, practical, cognitive and constructive analysis that revolves around it. Since this study reviewed silk as a crucial and fundamental issue, we discussed its cognitive content, in terms of being a significant development source that has to do with religion, history and business, science and construction. We focused on Kesi as a technique that links silk as a natural raw material, and silk as functional and technical use. We already noted that Kesi is an exquisite heritage- based craft with high manual skills, by its techniques we can weave silk yarns to manufacture pieces of cloth with complex ornate patterns on both sides and at the client's request in terms of color and texture and prominence to be used in the construction of luxury garments. By Kesi technique, we can also weave art or calligraphic works with a historical or global reputation to be displayed under a visual communication that carries within it many explicit and implicit meanings¹⁷⁹.

¹⁷⁹ For example, One of the creative approaches that connects the past to the present to make it always a source of reflection and innovation is the possibility of promoting heritage by rephrasing it in a way that inspires the thinking of the modern generation. This is what happened in the work of Prosperous Suzhou, which was accomplished by kesi craft and under the supervision of Lu Meiyong Silk and gold threads. This work is considered one of the largest works recorded in this field, with a work length of 17 meters and a width of about 48 cm. The work reflects something of China's character represented by mountains, rivers, boats, houses, more than 200 signboard shops, 503

We can say that since the discovery of silk until the present day, it has played a major role in social, economic and political life as we indicated in previous topics. Peter Frankopan says: "The most important item that was given was silk, a fabric that was treasured by the nomads for its texture and its lightness as a lining for bedding and clothing. It was also a symbol of political and social power" (Frankopan, 2016) yet because of the discovery of silk thousands of years ago, the first commercial global system was launched and named "silk line" as described by James Millward "the silk road through history accomplished the same sort of things we attribute to "globalization" today." (Millward, 2013)

Hence, when China revived the idea of the historic silk line as its most important development, it apparently revived a cultural and civilization communication through the concept of innovation that is based on culture. China knows through its historical records that silk is not only a trade, but a cognitive inventory of cultures and civilizations throughout the ages, among the nations and generations passed on between them, as Peter Frankopan explains: "There was good reason why the cultures, cities and peoples who lived along the Silk Roads developed and advanced: as they traded and exchanged ideas, they learned and borrowed from each other, stimulating further advances in philosophy, the sciences, language and religion." (Frankopan, 2016) What reflects the names of silk throughout history are the names of the places where silk was produced as well as the lengthy stories about culture and civilization. For example, (muslin) which was manufactured in the city of Mosul in Iraq, (damask) that was manufactured in the city of Damascus in Syria, (baldachin) in Baghdad (gauze) in Gaza and (satin) refers to the Chinese port tseutung, from which Muslim traders used to import precious fabrics. (Al-Hassani, 2012, p. 137)

From the above we can describe silk as a positive cultural accumulation, that tends to increase in the cultures that have rich materials and which grow through innovation, invention or expansion. One of the advantages of cultural

bridges and more than 10,000 symbols. The apparent innovation in this work is the beauty and accuracy of the work, but the implicit innovation in this work is the ability to rewrite an old work of 11 meters long and 35 cm wide in quality, proving the survival of the craft and skill after many centuries.

accumulation of silk is that it correlated between silk as a function and silk as an art. The best proof of that is Kesi products. Therefore, it is wrong in accumulated culture to not explain its system, patterns, elements and attributes without understanding the religious system as well as the economic and political systems etc. Pablo Markin describes this: Cultural accumulation requires connection to ideas, norms, aesthetics, and knowledge. It develops in the field of cultural association. This connection to culture is a factor of social influence that via the reputation of social action will be transmitted to cultural communication and realized in cultural products. (Markin, 2008, p. 20) Markin adds that the development of many provinces and cities around the world is affected by several factors including the level of cultural accumulation, that was previously explained about Jiangsu area as the most significant for the production of silk and generally its industry in China and the city of Suzhou in particular. Consequently, across globally, regionally and nationally spread cities, art exhibition spaces are the sites of differentiation, institutionalization, rationalization and interpenetration of cultural accumulation. (Markin, 2008, p. 41)

6.3.2. The Level of Cognition

The transformation from the level of cultural knowledge to a level of cultural cognition through three analyzing criteria: first, formulation of concepts and cognitive ideas within a proposed definition. Second, suggesting an approach to activating the proposed concept through developmental goals that meet the requirements of the current and future requirements. Third, using the interaction between the proposed concept and the cultural approach for discovering a creative productive model that could be applied and made use of:

6.3.2.1. The concept

According to Paul Schafer's¹⁸⁰ culture definition which was adopted for this study to prompt finding ideas that support innovation, which is based on culture through six pillars that have to be collected regarding the cultural or heritage issue. Therefore, we can formulate the silk topic in general, and

¹⁸⁰ Culture is "an organic and dynamic whole which is concerned with the way people see and interpret the world, organize themselves, conduct their affairs, elevate and enrich life, and position themselves in the world".

Kesi skill in particular through the following: Silk is a culture formed out of cognitive accumulation through the ages. All this knowledge, with its apparent and underlying aspects is indigenous knowledge (organic) for the depth of its historical content and diversity of civilizational sources and multitude of its technical methods such as Kesi technique. This knowledge holds within a creative or entrepreneurial knowledge (dynamic) that is able to interact with the requirements of the present and the needs of the future. Not because the silk history, civilizations and techniques are weaving materials only for trade, but because it is a sustainable source that will give more as long as it keeps expanding on a creative and innovative basis. Based on this cognitive philosophy, silk falls into the culture of life that combines mind and matter, therefore it generates social, economic and political systems as well as scientific, environmental, etc. These systems reflect the quality of the community's ideology in which it emerged, and also about the methodological relationship they created between silk and religion and values, education and training, work and production, innovation and creativity, art and design, technology and invention, etc. The higher the quality the richer the quality culture of silk, so it will gain materialistic and moral meaning that gives added value to the developmental advancement and constructive progress on one side and motivate the generosity and originality on the other.

6.3.2.2. The approach

The researcher was not to recognize the culture of silk and its dimensions according to the definition above, nor the importance of Kesi silk technique, without dealing with it through the theoretical culture approach, with which exhibitions were arranged, and conferences, seminars and scientific lectures were held, one of which was the university exhibition, "one Inch of Kesi silk, One Ounce of Gold". The participation of the researcher with the team of setting and directing and supervision for this exhibition alongside with Professor Tang Ming Xi 'the exhibition guy', and the architect Martin Riese, the director of the exhibition, and the mentor Wu Wen Kang, the owner of the exhibition's products and the expert Kesi techniques and its professional practitioner of technical and artistic textiles. This participation

assisted the researcher in attaining deep ideational dimension on how to deal with culture and highlighting the heritage it contains, not as ordinary typical exhibits and information, but with highlighting culture and heritage in a way that encourages creating initiatives and writing research, that can be used to explore innovations and designs that corresponds with the modern age in terms of knowledge and technique. The researcher believes that the exhibition with its simple potentials and limited space, has to prove that the scientific theoretical approach regarding culture and heritage enhances thinking skills and creativity, it also works on enriching the characteristics and outputs of heritage and culture that correspond with cognitive progress and technical development. In other words, the theoretical culture approach is capable of maximizing the appreciation of culture and heritage by the community. Not only as an exhibition and historical content, but also as participation in generating interactive ideas and innovations and exploring new modern production and service models, all based on culture and heritage without affecting identity and authenticity.

During convening the exhibition in the entrance lobby of the old school design at The Hong Kong Polytechnic University, the researcher spotted numerous positive feedbacks that link the visitor with the material of the exhibition, which can be listed under six philosophical data as follows: 1) Interaction with Kesi Silk as a functional product is manifested in artisan cloth upon the request of customers in constructing luxurious apparel and fashion design. 2) Interaction with Kesi silk as an artistic product presented in paintings that carry artistic patterns and woven calligraphic models that reflect the beauty of the content and the precision of the craft as well as the skill of the craftsman. 3) Interaction with the method of manually implementing Kesi silk with the loom to identify the artistic value and the capability of patience and the length of time spent. 4) Interaction with Kesi silk as a field for fostering ideological creativity and innovative attitude through scientific research and design products which postgraduate students have conducted. 5) Interaction with Kesi silk as an identity and authenticity, which its patterns and ornaments become directly or indirectly affected by the architecture, civilization and folklore of the place in which it

grows. This exhibition highlighted this philosophy with numerous pictures, videos and music. 6) Interaction with Kesi Silk through exchanging discussions between: the master Wu Wen Kang, his professional wife, academics and students of design and art, as well as, those who are commercially interested in Kesi products and its traditional quality.

It is important to note that the message of the exhibition is not limited to identifying the heritage of Kesi silk and interacting with it, although it allegedly might be. However, the underlying message and the most important is that the community that has a tendency for heritage in general, and the community of designers, innovators, and artists like practitioners, scholars and students in particular explore the factors of interaction and interrelation between the data of culture and heritage with today's reality by contemplating and thinking. For instance, Kesi silk as a complex and demanding manual for Chinese heritage contradicts China today in terms of advancement, technology, machine takeover and speedy information system over everything. However, Kesi silk is still working with the same old quality, and there is a demand for it inside and outside of China. Yet this heritage was revived in previous eras in accordance with the needs of every era. Today we witness its fifth revival as we live it. We also indicated in the first quarter of the 21st century, the century of knowledge and advanced technology. Despite the fact that technology could not neutralize this manual craft and replace it with a more advanced mechanical technique. The question is why? What is the hidden secret behind the persistence of a complex and demanding manual heritage? Do we need to replace everything with mechanical products? And we do not need a thinking founded on apperception linking the experiences of the past and the requirements of the present as well as aspirations of the future. An attitude built on augmentation offers us products, services and theories that connect between the fact of interaction and interrelation with the capacities and expertise of the human mind throughout history and the properties of the material and adapt it with the advancement and variability of time.

6.3.2.3. The model

What is the innovative model that we can conclude from the visual cultural introduction (education, research, training, exhibition, museums, etc. which can be used for the activation of heritage in general or reviving a certain heritage-based case, such as the Chinese heritage of Kesi silk in particular? As we mentioned earlier that the innovative model which is based on culture has to be founded on two bases, which are culture as a knowledge, and culture as a motivational character, both have to interact with the information system (Religion, history, business, education, architecture and civilization) for each cultural or heritage-based case to be studied, so it will be concluded within a proposed definition. In the case study of Kesi silk we reached a general cultural definition that considers silk and what came out of it since its discovery, an authentic culture made up of cognitive accumulations and interrelations throughout history, one of which is indigenous knowledge (organic) and the other is entrepreneurial knowledge (dynamic) hence the researcher finds that the best model which can be improved and taken into consideration for such cognitive accumulations and interrelations is design intervention. This model can be dealt with as follows:

A. The Kesi Silk as Knowledge

We explained in detail how silk became a cultural phenomenon that many civilizations have comprehended a long time ago and recently, as it managed to be an important part of these civilizations in proportion with them. That would have not existed without the culture of silk and what it generated of different outputs, which became sources of human knowledge. This knowledge combines heritage that has been shaped by different communities, and advanced science that is still being shaped because of the cognitive and technical breakthrough that the world is witnessing with the entry of the 21st century. The question that rises is; is there no method to invest the ancient and modern knowledge of silk contributing to an earnest innovative and design -based outcome? Silk only has one natural material, and the means of extract it has remained unchanged for centuries. The silk yarn that has been used in weaving is the same which advanced research of medicine, engineering, chemistry

and physics is based on today. Nonetheless, the field of this study is restricted to innovation that is founded on culture and heritage, therefore innovation cannot take place without experiences of the past as well as present data and future cognitive aspirations which can be activated through design intervention, where this methodology can bring together multiple data, information, and various knowledge to generate numerous innovative ideas. Xiangyang Xin says: “With the present environmental mess, designers must enlarge our areas of knowledge and help to guide the intervention of design with nature and mankind”¹⁸¹ (Xin, 2007, p. 171)

B. The Kesi Silk as Motivations:

Moreover, design intervention reinforces the attachment of different types of knowledge among itself, it also stimulates aspirations towards finding creative motivations between the differing intellectual levels within various production fields. For instance, in the field of reviving the materialistic and moral heritage, it is possible to use design intervention as an ideological methodology that enhances creativity and innovation built on reviving heritage in accordance with the functional, aesthetic and economic demands of the era. Therefore, design intervention interacts with apparent and tacit knowledge to improve new ideational patterns for manual crafts, not only between craftsmen and designers but also between those who are interested, such as businessmen, vendors, buyers, production systems, trademark, marketing and the quality of materials as well as the type of techniques used in the heritage and manual crafts manufacture. That will be improved as it is known that heritage-based industry and manual crafts are made out of a series of processes and not only one. Consequently, when improving this field and contributing to its innovation not only from one angle but from all functional, aesthetic and economical, etc. angles. The outcomes after using design intervention might be a developing process for current products, in terms of looks, size, color, ornament and texture or an innovation process in terms of designing new products, activating

¹⁸¹ Main information source Victor Papanek, *The Green Imperative: Natural Design for the Real World*, Thames and Hudson, New York, 1995, p 11

traditional skills to meet new opportunities and challenges and discovering new techniques or materials. Or else, it could be a beneficial process in terms of economy (starting up new shops or reviving collapsed markets). The study conducted by UNESCO indicates the importance of allowing a convergence between craftsmen and designers through design intervention to many significant criteria, for example:

Design intervention is an interface between tradition and modernity and calls for matching craft production (knowledge) to the needs of modern living... Intervention to create new product lines, provide knowledge of the market and establish new market links...It is also essential to recognize what an artisan gains from the (design) intervention. It is this knowledge that fuels sustainability, (such as) sustainable livelihoods, new markets, value addition to products, exposure/visibility, community rehabilitation, gender equality, technical enhancement and confidence and self-belief. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, pp. 114, 117)

6.3.3. The Level of Interaction

The interaction level is a tool of synthesis of the level of cognition. The aim of this synthesis is creating, innovating or designing modern products and presenting services with identity. The application level requires arranging priorities based on the realm of things we need, the realm of people leadership or the realm of creative and the best ways of thinking:

6.3.3.1. The things

The researcher believes that the first priority in activating and reviving Kesi technology in our time, based on the previously proposed model may not be by focusing on the same technology to attract the modern generation because it is a technique of ancient Chinese heritage technology. The reason for this is that each era has its own intellectual data and material and moral bonds that are compatible with its social lifestyle and its cognitive and productive capacity. In addition to the number of alternatives to textiles and

embroidery that much of the markets is now providing because of globalization!

The researcher believes that the focus on the value and culture of the silk "thing" which generated Kesi technique is the basis that should be given the priority through which Kesi Silk would be revived by thinking outside the box. In other words, the contemporary generation must understand that silk products, especially Kesi Silk products, are not a normal "thing" that can be found in pieces of fine fabric of the rich garments, accessories or furniture. On the contrary, it must be clarified that Kesi Silk products are lively and active "things" that are valued by the ancient silk culture, which as we explained is found by the profound interaction of religion, history, work, science, architecture and human civilization in general. It is, therefore, important to deal with silk products in general and Kesi Silk in particular, in terms of being overlapped through the ages with both material and moral daily life. Indeed, unlike what many believe that those Kesi Silk products are a model of the life of materialistic well-being of the manifestations of extravagance and the needs of the rich, they show the materialistic and moral life full of love and beauty, feelings, emotions, patience, hardship, joys, and sorrows among people. One of the successors of Islam Ali ibn Abi Talib¹⁸² says:

The best food for the son of Adam is the bees reap (honey), the best of his clothing is the worm saliva (silk made by the silkworm). Isn't it surprising that the most precious clothing man ever had, and the greatest food and medicine is made by insects?!¹⁸³

Then, the generation has to learn that silk which we are boasting about is an output of the life circle of an insect. If we take its cocoon's material, we make the best and most beautiful silk thread. If we have let it grow, it will be the most beautiful insect . It will be a butterfly of more than twenty thousand types. Allah

¹⁸² Ali ibn Abi Talib (601 – 661) was the cousin and son-in-law of Muhammad (PBUH), the last prophet of Islam. He ruled as the fourth caliph from (656 to 661)

¹⁸³ Arabic text:

"خير طعام بن آدم من رجيع نحلة (يقصد العسل) وخير لباسه من لعاب دودة (يقصد الحرير الذي تصنعه دودة القز)، أليس من العجب أن يكون أفخر لباس يزهو به بني آدم وأعظم طعام ودواء لبني آدم من صنع الحشرات".

has gifted it with an enchanting shape, bright colors. Upon it, uncounted words of poetry and thoughts have been said. It has been the center of so many myths and a flower lover mentioned it". (Autek Al Borini, 2016)

Therefore, we need Silk Entrepreneurship who believe in Silk Interventions based on the footage of the past, potentials of the present and future aspirations. They also have innovative, interactive thinking based on apperception and an innovative competitive approach based on augmentation that is capable of creating a new, valuable thing of products, services, and theories that connects the abilities and experiences of the human mind besides the components and properties of matter. This trend is impossible to achieve if we look at the Kesi Silk of its traditional functional or aesthetic aspects. Therefore, we should do Design Intervention as we have already explained. In this way, we can produce a generation which does not think about the past only from a symbolic point of view, but interactively surpass the ordinary ideas into more advanced levels of creativity and innovation that are compatible with their time like: introducing new economic activities, creating new organizations, or promoting values and knowledge through globally competitive patterns. [29]

6.3.3.2. The people

Here, we are going to talk about the second most important factor in reviving Kesi Silk; the Master. In China, the word "master" refers to the expert craftsman who is completely aware of every aspect of his or her traditional craftsmanship. In this study, the shop and the factory of Wu Wen Kang were considered as the case study for producing and selling Kesi Silk products. Wu was born in April 1960, in the small town of Dongzhu in Suzhou. As a young child he liked drawing and was deeply influenced by art and Kesi silk products. Gradually, he learned the Kesi technique by working in factories. Wu has perfected the design, color selection, and production techniques. He established his first factory in his hometown with a loan of only 1,000 yuan. He used this money to rent two rooms and make 10 pieces of Kesi on the wooden loom. Since 1998, Wu has exhibited his designs and products throughout China and abroad, won numerous awards and built a good reputation and high standing as a businessman.

We founded the Wen Kang Pavilion of the Kesi Silk Art Museum in Zhenhu, Suzhou. The pavilion features more than 100 designs and materials of silk from Kesi Silk. UNESCO recognizes Wu as a teacher of Chinese fine arts and crafts. He was ranked as a senior industrial artist by UNESCO. He is a member of the Chinese Association of Fine Arts and Crafts and the Vice President of the Suzhou Folk Arts and Crafts Association. Wu is experienced in numerous Kesi silk knowledge areas, handmade looms, banking threads up, silk painting, coloring, and Kesi Silk texture restoration. Kesi Silk cannot be revived without the experience of these important counted craftsmen.

The researcher conducted an exclusive interview with Master Wu to be a guide for entrepreneurs or designers who want to know more about the idea of crafts in Kesi Silk. Master Wu Wenkang believes that the quality of Kesi Silk textiles lies in six things: 1. The density of silk yarns in both directions; vertical (the warps) and horizontal (wefts). 2. The clarity and accuracy of the woven decorative patterns, which means the accuracy of designing and drawing on paper before transferring them onto silk warps. The warps are then woven with dozens of colored wefts. 3. The beauty and vitality of colors, which means the proficiency of selecting the texture and colors of horizontal silk yarns (wefts) in accordance with the decorative patterns. A flower, for instance, may require five or more colors to show its real effect, whereas in other textile or embroidery techniques the number of thread colors used is less. 4. Sensation through sight and texture with a piece of fabric like a sculpted work. 5. The accuracy of double-sided fabric symmetry. 6. Wu's wife adds the moral attributes, which must be within the behaviors of weavers because of its importance in promoting the quality of Kesi Silk textiles are: A) Considering the technique of Kesi as a love that interacts between the feelings of the person and silk as a texture and color. B) Applying the professional ethics of Kesi and working with precision and high skill no matter how long the fabric work is required. C) Patience and non-boredom; one of the most important qualities that should be embedded in weavers.

Wu implies that not many of the new generation have the desire to learn the technique of Kesi due to its complexity and the length of time it takes. Therefore, attempts have begun to convert this manual technique into a machinery technique, which corresponds to the technology of the era and maintains the continuation of Kesi texture. However, the output of these mechanical experiments in Wu's opinion is still far from the real quality level of Kesi. This is because any cut weft in the width of the texture is texturally inaccurate. Hence, Wu believes that the skill of mechanical producing has reached the level of Brocade, but certainly, the mechanical output is less in quality of the real Kesi fabric, which must consider the physical and moral points mentioned by Wu and his wife above in case of working on the traditional handmade loom. About the transfer of Kesi technique to other countries, Wu did not welcome this idea not for professional reasons, but for patriotic reasons. He believes that Kesi is a unique Chinese heritage, therefore, it being transferred, will lead to it being lost! On the other hand, Wu regards exhibitions or festivals as a means of introducing the product in the short term, but it is not a fruitful way to develop the production and increase sales of Kesi in the medium and long-term. Apart from that, exhibitions and festivals are not a good way to generate ideas and innovations about Kesi, or heritage in general. They are only occasions of specific commercial significance at the specific time.

Wu believes that the best way to develop and revive the heritage and to build ideas and innovations in our time is by the support of governments with appropriate funds allocated to education, training and scientific research through establishing bridges of communication between craftsmen and universities, and craftsmen and the economic development system to attract and train the new generation through specialized professional associations. The government provides the salaries of its craftsmen and supports training fees as the craftsmen cannot bear the financial burden of developing and reviving the heritage or the practice of training without meaningful salaries that motivates them to take part of their time to teach and impart their knowledge to others. It is because their role is the

production to keep this heritage alive and maintain their source of livelihood even with a small margin of profit.

Wu, therefore, supports dealing with designers, entrepreneurs and innovative thinkers for being the best minds capable of providing intellectual solutions and building a brand new generation. Wu also believes that dealing with designers and innovators should not be limited to the requirements of traditional university education and traditional scientific research, but the process should be upgraded to become a practical interactive methodology within a real production line in the factory. He thinks that no matter how excellent a student is in college, the factory stays important to get along with the working environment, develop skills and gain virtual and implicit knowledge of the craft with all its details and historical expertise and complex stages, which opens the way for more designs, innovations and ideas pioneer. As for increasing the production of Kesi, Wu believes that the best production line is full-time work in the production place as part-time or rotation work on one task will not have the quality that can be committed to one person. In addition, the place of production is a healthy environment and motivates the weaver's community to focus and encourage some of them to work and be patient. Their gathering is also a cycle of knowledge and the infinite growing level of skills between them.

Wu believes that due to the limited current size of the factory he owns, functional textile products are the best choice, the most important of which are Japanese kimono, but this does not mean that its demand is still as large as it has been. He also says that gifts and accessories are still among the typical products whose prices should be affordable or they will not be sold especially when the supply is more than the demand. Wu supports the idea of creating a company for Kesi textiles based on innovation and design in the field of clothing, fashion designs, gifts, accessories, household items, etc. The aim of the company is to promote the development of Kesi textiles of no less than 20 production lines; in his opinion, they should be compatible with the rich of society. In addition, Wu wishes to attract the privileges of international companies and open areas of cooperation with famous brands. He also believes that Kesi textiles are unsuitable for covering furniture. As

for the use of Kesi as one of the finishing materials of interior design luxury interior, he said that this trend was unheard of before and he has no concept or ideas about it.

This interview is incredibly important as it ensures what the study conducted by UNESCO has referred to as the importance of the activation of craftsmen through Design Intervention:

most artisans are not active players, either in spearheading change or in marketing... that the artisans need to be involved in every aspect of market research, design, production, costing and marketing, and also need to understand the adaptations and changes in the form, function, usage, and sale of the product that they are making, is a form of intervention that has achieved a virtual consensus...Artisans thus need design intervention to compete successfully with the products and practices of modern industrialization. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, pp. 3,5,9)

6.3.3.3. The thinking

The researcher believes that reviving the heritage of Kesi Silk¹⁸⁴ needs a creative thinking skill that connects Silk Entrepreneurship and Kesi Silk Artesian using the data provided in the previous topics. Creative thinking also needs mentalities that are capable of contemplating silk as "natural made things" because of its sustained historical interaction with man and nature. It is because "Man Made Things" have to do with human desires, needs, and explorations as a material or moral product¹⁸⁵ capable of interacting with creative ideas and modern technologies.

¹⁸⁴ The revival of the heritage must be useful: a material and non-material heritage that corresponds to the religion, values, customs and traditions of each society in general and particularly the belief of Islam, which the researcher believes. For example, the researcher does not agree with developing a wire mesh exclusively for the rich, or to be a garment for a Muslim man, or to have accessories for drinking wine, or to work because of financial gains without quality and workmanship.

¹⁸⁵ Priscilla Lowry provides numerous examples regarding the silk as products and uses in her book "the world of silk" such as, The silk fabrics range from the lightest organza to heavy upholstery and carpets. In ancient China it was used for light armour. Today it is used to make bulletproof vests. Silk was also used for parachutes and tyre linings for racing cycles, elastic webs, electrical instruments,

To make such creative thinking achieve a fruitful connection between the reflection of things and understanding our behaviors around it and our sustainable desire for innovation, invention, and design thereof, it became necessary to attract designers to the field of culture and heritage as well as to take advantage of their design ideas in activating the design interventions to become a revival of Kesi Silk-based on three skills which are: entrepreneur, artisan and designer. It is important to clarify some of the roles of the designer in this proposed triangle to revive and develop Kesi Silk:

1. An indispensable intermediate, a 'bridge' between the artisan's know-how and his knowledge of what to make. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. V)
2. An important mediator between discontinuous realities. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 4)
3. An interface between tradition and modernity, helping match craft production to the needs of modern living. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 4)
4. To commit to the client and his product is not determined by his personal tastes and ideas; the designer's own style does not matter because his style is determined by the market niche to which he caters. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 108)
5. To help the artisans organize their work and adopt different methodologies. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 88)

fishing lines and ropes. Hybrid silk is used to make artificial blood vessels, bandages and sutures for wounds. The pupa has a wide range of uses. It is rich in oil, proteins, minerals and vitamins E and K. The oil is used in soaps, cosmetics and creams, and the pupa is eaten in Asian countries as a snack, freeze-dried or pan-fried. It is also used as a scientific medium in Korea to grow a variety of spores, fungi and enzymes and developed into nourishing and strengthening drinks, syrups, a natural alternative to Viagra. The skin of the tussah pupa, known as 'chiton', has been developed as a natural health food, with wide claims to lower cholesterol, assist weight loss and improve digestion. The Mulberry roots, bark, leaves, fruit, branches and timber have another wide range of uses. The silkworm litter is burnt to produce bio-gas and as fuel for cooking in rural areas and to feed fish and ducks. The silk has the ability to absorb moisture up to 30 times its weight, to be warm in winter and cool in summer, makes it one of the most comfortable fabrics to wear. It is relatively robust, easily washable, wrinkles hang out when it is worn and it dries quickly. Silk is also hypoallergenic, and the medical profession has long used silk for suturing and protecting wounds. Today, the scientific push is towards expanding its use into alternatives and food products. Silk is a fire retardant. **Invalid source specified.**

6. As the link to the market; while not always providing direct market access, the designer nevertheless opens windows of opportunity that afford a view of the market and consumer preferences. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 136)
7. To perceive as having expertise in thinking through the complexities of developmental concerns, capacity building as well as community mobilization, that is beyond being seen as only concerned with visual aesthetics. (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 35)

Accordingly, we can say that in order to reach developed or innovative cultural or heritage products, we must first understand and strengthen the relationship of heritage industries and handicrafts to religion, history, industry, science, civilization, and urbanization. Secondly, invest the knowledge and creative experience of Artisans in accordance with the material or moral characteristics of the product or both. Thirdly, formulating the product within a contemporary cultural concept by designers.

There is a need for intervening agencies/designers to understand and study the craft(s), the product(s), and the market(s) that they are trying to enter in order to inculcate sensitivity towards the needs of the artisans, also minimize the space for exploitative middlemen and traders.” (the Craft Revival Trust, Artesanías de Colombia S A . and UNESCO, 2005, p. 9)

6.4. Observational study 4: Contemplating culture components through Saudi national festival for heritage and culture¹⁸⁶

It is no doubt that oil discovery in Saudi Arabia in the first third of the twentieth century¹⁸⁷ and the subsequent developmental plans¹⁸⁸ allowed Saudi Arabia to race against time to achieve advancements in different fields, to become a modern country that enjoys all means of development and luxury. Yet the policy of open

¹⁸⁶ This observational study was conducted in 2016 before the festival organization was transferred from the Ministry of National Guard to the Saudi Ministry of Culture in 2019

¹⁸⁷ 1933 Oil concession agreement signed, 1934 First geological survey, 1935 First well drilled and 1939 First tanker load of petroleum exported **Invalid source specified.**

¹⁸⁸ 1970-1975 the first Saudi national plan.

market attracted to it all kinds of consumer products from all around the advanced world, it also facilitated the communication between the merchants and international industry and production markets to provide and design consumers' requirements not only at the Saudi level but also at the Arabic and Islamic levels. This posed as a danger to the Saudi cultural heritage, which prompted then crown prince, King Abdullah Ibn Abdel Aziz¹⁸⁹, to adopt the establishment of an annual festival that attracts people to their heritage and culture, to keep up with the vast openness to the world in all areas on one hand and maintain great pride in the Islamic identity and Arabic authenticity on the other. Prince Miteb bin Abdullah – the son of King Abdullah – the earlier national guard¹⁹⁰ assured the country, that the festival reflects the glory of culture and heritage of Saudi Arabia and seeks to maintain its intrinsic Arabic and Islamic identity and act as a source of inspiration to the existing and future generations in embracing their glorious heritage. The results of the festival, was that it quickly evolved from displaying simple handicrafts that represent the well-known crafts in the Kingdom's areas, to a wide ceremonial festival that lasts and exceeds to more than two weeks; in which handicrafts and traditional industries and all types of folklore, customs and traditions are displayed. Wherein every governorate shows its heritage crafts and displays its culture and arts that it is famous for, in addition to the operetta that is inspired by the Saudi musical and poetic spectrum. The festival allowed the Saudi woman to be strongly present and enabled her to showcase her skills in the folkloric arts. Also, it enabled her to express and display her cooking abilities and her abilities in preparing various national drinks. Moreover, we cannot fail to mention the unmatched camel race, thus giving importance to this animal which, besides the horse has been a companion of the Arab community as a means of transportation and as a great benefit.

We can say that the Saudi national festival for heritage and culture, is a product of a creative idea emerging from the idea of showing a sense of belonging to Islam and the Arab nation, as well as keeping culture and heritage as a model for the

¹⁸⁹Abdullah bin Abdul-Aziz Al Saud (1924 – 2015) were King of Saudi Arabia and Custodian of the Two Holy Mosques from 2005 to his death in 2015. King Abdullah believed that China, as well as India, were the future markets for Saudi energy.

¹⁹⁰ the Ministry of the Saudi National Guard is the sponsor of the National Festival and its minister is responsible for the preparation and annual evaluation of the festival.

generations. Indeed, this is the feeling that prompted the former king of Saudi Arabia (Abdullah Ibn Abdel Aziz) to authorize the launch of the festival in 1985¹⁹¹. When the researcher was a student in the department of architecture, the festival joined him in building a museum for the Royal Commission for Jubail and Yanbu in 1986, this was the first building constructed in the festival's area using the old clay buildings technique in Najd in collaboration with a specialized French center.

More than 40.000 clay blocks were made to construct the building at that time. The researcher visited the festival in its thirtieth session in 2016 as a case study, namely after 30 years of his participation as a student. The researcher was surprised by where the building had been constructed, back then it was in the villages, today however, it is located among a cultural and traditional village including a great number of permanent buildings and versatile areas that extend along approximately 1200 meters between the village's northern and southern gates. Undoubtedly, the festival has excelled and developed over the years to impress the visitors with the traditional and cultural programs it presents annually and which reflect all the areas of Saudi Arabia, yet it discusses through its seminars regional and international cultural issues.

6.4.1. The Level of Knowledge

The collection of explicit knowledge and the exploration of tacit knowledge of the Saudi national festival for culture and heritage, through six criteria, enhance the understanding of culture from a conceptual perspective. Also, how to intellectually elevate it, to create a deep awareness capable of finding innovations based on the requirements of the present and future visions:

6.4.1.1. Religion (ad-Dīn)

The Islamic dimension in the Festival is not counterfeit nor is it an axis that the organizers work to highlight. The Islamic dimension in the Festival is a natural involuntary identity, and a spontaneous practice stemming from the

¹⁹¹Su'od Arrumi, the festival director, says that the idea of the festival has been here since 1967. It was only a day for camel race. In 1985, it was suggested that it should be developed to more than one day, and it should include various activities. The idea promoted by the prince Abdullah bin Abdul-Aziz (the former king) who asked the king Fahd bin Abdul-Aziz, who, approved it under the name the National Festival for Culture and Heritage. The first festival was held for a week in 1985 . There was only a popular market. When the king initiated the festival, he ordered that festival to be held for two weeks.**Invalid source specified.**

values and morals of the Arabian Peninsula society before the Saudi Rule and after it. This dimension states the following:

"The Kingdom of Saudi Arabia is a fully sovereign Arab Islamic State. Its religion shall be Islam and its constitution shall be the Book of Allah and the Sunnah (Traditions) of his Messenger, may Allah's blessings and PBUH (PBUH). Its language shall be Arabic and its capital shall be the city of Riyadh" (The Bureau of Experts at the Council of Ministers , 1992)

The first goal of the festival is emphasizing on the values of Islam and the originality of Arabic culture:

"Emphasizing the religious and social values which are deeply rooted in history to stimulate the Islamic heroism and recall the good traditions and norms that have been urged by Islam."
(The national festival of cultural and heritage , n.d.)

The love of Islam runs in Saudi society's blood, as a result, it follows Islam's rituals and instructions within its daily life, regardless of time and location. The researcher considers the festival one of the most beautiful international samples of culture and heritage that can be philosophically utilized by linking religion on the one hand, and the culture and heritage of the society on the other. This can be summarized by two axes:

The first axis, the Islamic dimension in the apparent mode of the festival: the visitor to the festival will hear the call to prayers (Adhan) either through the amplifiers or through an ordinary person, they soon will see groups of people gather in different places as they are in the festival to perform their prayers on time, spontaneously without compulsion or intervention of Muslim clerics or organizers. The remarkable thing in this phenomenon that even if the visitor wants to continue to see the festival which is his right, he will have to wait, for the fact that most of the organizers of the festival activities such as artisans, manufacturers, artists, poets, organizers, and others will be mostly dedicated to performing their prayers and then return to their work, since prayer is a priority for every Muslim. Does this priority have an impact on the culture

generally, and particularly on the craft? The answer is; Absolutely yes. One can revert to the topic of "Culture as beliefs and values" in the first part of this thesis to comprehend this topic and its importance. The Saudis were the first to create mobile prayer halls. We have reviewed this innovation in the second appendix of this thesis under the topic "Culture spreads religion" in example 27 about culture-based innovation.

The second axis, the Islamic dimension in the practical mode of the festival: The visitor to the festival may directly or indirectly deduce, that there are practical cultural and heritage-based dimensions that have a close relationship with the daily Islamic lifestyle of the Saudi society in the past and nowadays. Some of these cultural and heritage-based dimensions have a relationship with the system of "life and religion"; i.e. life is affected by the values of Islamic religion which are abided by the society of the Arabian Peninsula historically and constitutionally as previously mentioned. These Islamic values -blended with the Arabian originality - are presented within the festival in a beautiful practical abstraction, as a cultural and civilized system at the level of (the acts of worship), (the customs), and (the transactions) in the Muslim society of Arabian Peninsula.

At the acts of worship level, which is "a comprehensive term of everything that Allah loves and approves such as sayings, internal and external acts ordered by Him or by His Messenger PBUH". We find that the festival highlights part of this worship; Muslim life is not just something symbolic or formalistic, rather it is a practical ritual worship, i.e. listening to the prayers' call (Adhan) and the performance of prayer, which is previously mentioned above, is the same thing and belongs to one system of acts of worship and integrated values such as honesty, smiling, welcoming, generosity, eating, drinking, and legitimate earnings, ... etc. The complete visitor of the festival will notice in practice some of these devotional scenes that link the Muslim's life in all its aspects (learning, working, entertaining ... etc.) with the worship of Allah. For instance, many non-Muslims believe that prayer in Islam must be performed only in the mosque, this is untrue. People in the festival are not obliged to go to the mosque to perform their prayer; wherever the person is, he could perform the duty of worship alone, with his family, or with a group of people in the prayer's halls or

on prayer's rugs located anywhere. Worship in Islam is a bond built on honesty, sincerity, and trust between the Muslim and His or Her Lord, without any mediator or complexity.

At the level of customs, which is "a comprehensive term for everything that people are used to among themselves such as food, drink, housing, clothing, transport, medication, decoration, and travel customs, etc.", which do not contradict the Islamic religion and the customs of the Arab community in general and particularly the Saudi society. The festival paves the way for visitors to observe and reflect on these customs and traditions generated from them and to explore their origin and development according to the extent of thinking and comprehension. The most important cultural Islamic system that affects the customs and traditions, that could be observed by the festival's visitors, is the concept of "allowed¹⁹² and disallowed¹⁹³" in Islam which is not only about eating and drinking but also about all Muslim's public and private lives. The system of "allowed and disallowed" in Islam is considered by Muslim lawmakers within the level of worship, which has been briefly mentioned above. Hence the visitor will not see any kind of cultural and heritage customs and traditions related to any form of disallowed religious deeds. As a way of illustration and not limitation, the visitor will not see any handicrafts or traditional industries of foods that Islam forbids its sources such as pork and blood, or foods that Islam forbids because of its production means like killing and suffocating, etc. This represents following and abiding the commands of the Holy Quran, Allah Almighty says in the chapter of Al-Maida, third verse:

(حَرَّمَ عَلَى كُمْ الْمَيْتَةَ وَالْدَّمَ وَلَحْمَ الْخَنزِيرِ وَمَا أَهْلٌ لِّغَيْرِ اللَّهِ بِهِ وَالْمُنْخَبِقَةَ وَالْمُوفُوذَةَ
وَالْمُتَرَدِّيَّةَ وَالنَّطِيحَةَ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا ذَكَّيْتُمْ وَمَا ذُبِحَ عَلَى النُّصُبِ وَأَنْ تَسْتَقْسِمُوا
بِالْأَزْلَامِ ذَلِكُمْ فَسُقُ) (المائدة، 3)

¹⁹²Halal is the thing in which the prohibition complex has been disbanded and the Islamic law has authorized it to be prohibited.

الحلال هو "المباح الذي انحلت عنده عقدة الحظر، وأذن الشارع في فعله"

¹⁹³ Haram is the thing which forbade the street to do so firmly so that it is exposed to the violation of the prohibition of the punishment of God in the Hereafter and may be subject to a legal sanction in the life as well.

الحرام "هو الأمر الذي نهى الشارع عن فعله نهيا جازما، بحيث يتعرض من خالف النهي لعقوبة الله في الآخرة، وقد يتعرض لعقوبة شرعية في الدنيا أيضا"

(Forbidden to you are carrion, blood, the flesh of swine, the animal slaughtered in any name other than Allah's, the animal which has either been strangled, killed by blows, has died of a fall, by goring or that was devoured by a beast of prey - unless it be that which you yourselves might have slaughtered while it was still alive and that which was slaughtered at the altars. You are also forbidden to seek knowledge of your fate by divining arrows. All these are sinful acts) Quran (5:3)

The visitor will see neither any cultural nor heritage aspects related to alcohol as manufacturing or dealing, not even the arts of gambling and its means, abiding by the saying of Allah in Surat Al-Maida, verse 90:

(يَا أَيُّهَا الَّذِينَ آمَنُوا إِنَّمَا الْخَمْرُ وَالْمَيْسِرُ وَالْأَنْصَابُ وَالْأَزْلَامُ رِجْسٌ مِّنْ عَمَلِ الشَّيْطَانِ فَاجْتَنِبُوهُ لَعَلَّكُمْ تُفْلِحُونَ) (المائدة، 90)

(Believers! Intoxicants, games of chance, idolatrous sacrifices at altars, and divining arrows are all abominations, the handiwork of Satan. So, turn wholly away from it that you may attain to true success) Quran (5:90)

The visitor will not see any crafts or industries based on the weaving of silk and gold industries as clothing or accessories for men, following the saying of Allah's Messenger PBUH:

أَنَّ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ {أَجَلُ الذَّهَبِ وَالْحَرِيرِ لِإِنَاثِ أُمَّتِي وَحَرَمَ عَلَى ذُكُورِهَا}

"Gold and silk have been permitted for the females of my Ummah and forbidden to the males."¹⁹⁴

The visitor will also not see any crafts or traditional industries of eating and drinking utensils made of gold or silver, following the saying of Allah's Messenger PBUH:

¹⁹⁴ <https://sunnah.com/nasai/48/109>

قَالَ النَّبِيُّ - صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ {لَا تَشْرَبُوا فِي أَنْبِيَةِ الذَّهَبِ وَالْفِضَّةِ، وَلَا تَأْكُلُوا فِي صِحَافِهَا، فَإِنَّهَا لَهُمْ فِي الدُّنْيَا، وَلَكُمْ فِي الْآخِرَةِ} مُتَّفَقٌ عَلَيْهِ

“Do not drink in silver or gold utensils, and do not eat in plates of such metals, for such things are for them (the disbelievers) in this worldly life and for you in the Hereafter.”¹⁹⁵

The system of "allowed and disallowed" in Islam is based on the concept of preventing corruption and bringing advantage, as well as caring for the interest of humankind as a whole, in mind, body and soul. So we find that whenever Islam forbids things, it compensates the Muslims with better things, for instance, Islam prohibits (divining arrows) (a custom was made in al-Jahiliyah to consult Allah when doing something) but allows "the prayer of Istikharah", forbids usury whereas allows trading, forbids gambling while allows beneficial competitions, forbids silk and gold for men but allows all kinds of luxury clothes of wool, linen, cotton and the accessories of silver, forbids adultery, homosexuality, and lesbianism while allows marriage, forbids drinking alcohol but allows delicious, beneficial drinks for soul and body. Therefore, if we follow all the rules of Islam, we conclude that Allah Almighty does not deprive his people of anything in any aspect of life, without offering an alternative of the same kind, and this is one of the most important laws of philosophy that made Muslims in their golden ages the most creative and innovative thinkers in finding alternatives. However, Islam has set degrees to promote finding scientific or practical alternatives such as a "duty" which the human is rewarded for doing and punished for leaving. Also, as the "favorable" the human is rewarded for doing, and not punished for not doing it. In order for a person or the community not to commit the disallowed, Islam set an alerting step towards the ideas or behaviors that are (not favorable) which Islam has not affirmed as prohibited, because presenting and disregarding them would incite the individual or the society to commit the disallowed.

¹⁹⁵ <https://sunnah.com/bulugh/1/20>

At the level of relations, which is "a comprehensive term of everything that happens among people as actions, relationships, and benefit-sharing." The festival allows the visitors to observe these transactions within several scenarios according to the extent of cognitive comprehension of the visitors in the previous two levels of worships and customs. For instance, the festival allows the cultural and heritage identification at the level of relations based on relationships such as family and relatives' rights, neighborhood and neighbor rights, marital rights, etc. Or at the behavioral level, including the old urban structure characteristic, which unfortunately was not applied to the modern urban structure or the characteristic of the old and traditional houses design in relation to men and women and how this characteristic has been upgraded in modern designs. Or at the level of benefit-sharing which is based on honesty, trustworthiness, and generosity.

What is mentioned above is a very small part of what the festival shows about the influence of religion and values on culture and heritage in the Kingdom of Saudi Arabia. This impression may vary among visitors, as some of them see the festival from an entertainment perspective to enjoy the old heritage and to buy some of its products. Some others see the festival as an implicit knowledge full of intellect and philosophy that can be employed within the development of production and global competitiveness.

6.4.1.2. History (at-Tarikh)

Until the writing of this thesis, the festival has achieved 32 sessions, the first one was in March 1985 and the last one was in February 2018. During these long years, the festival gradually interacted with numerous cultural and traditional data that Saudi Arabia possesses (the Arabian Peninsula) before and after Islam. Based on this interaction, the festival had developed and expanded until it became a heritage-based, cultural and tourist village that had an area of 1.5 square kilometers. This village contains urban compounds, each compound represents the culture and heritage of an administrative area of the 13 Kingdoms of Saudi Arabia. Each compound includes a house, shopping centers, handicrafts, equipment, industries, acquisitions, old goods and what each area is famous for like its cultural and civilized legacy as well as the folkloric displays. The staff that has been

selected from the concerned governorate during the festival preparations manage the constructing, developing and the activities of each compound. In addition to these compounds, the village contains buildings for the institutions, government circles, public markets, handicrafts, exhibitions, museums, halls for multiple activities, Arabian Gulf Countries Headquarters and the guest state, praying areas, areas open to public dance and different activities, tents assigned to traditional songs, poetry and the drinking of Arabian coffee, in addition to camel races, horse reviews, food and traditional dessert shops. Since the third session of the festival, it has been accompanied by many seminars, lectures and poetic evenings in which prominent intellectuals from inside and outside Saudi Arabia participated. In the same session, it attracted the first suite for national industries and held the first competition for the Saudi children interested in the Saudi public heritage.

The Cooperation Council of the Arabian Gulf Countries participated in the fourth festival, many chivalry shows were displayed, and a book exhibition was held for the first time. The fifth festival witnessed a national lyrical operetta which as a whole constituted a great historical civilized technical work. In the sixth festival, the following were presented; the old way of sesame, the pressing that was done by circulating the camels around the juicer. The tenth festival allowed women to contribute and participate in its heritage and cultural activities. The Qatari national band for folk arts participated in the twelfth festival for the first time. In 1999 the fourteenth festival was held to be within an important event, which was the 100 anniversaries of establishing Saudi Arabia. The number of government authorities that participated in the nineteenth festival was 49 and 3 partnerships from Arabian Gulf Countries , 237 handicrafts were shown, plus the exhibitions of floral and oud perfumes, and folk meals. Since the 23rd session, the festival used to host a state as a guest of honor aiming at seeing their culture and civilized achievements. The guest states that participated in the festival according to their seniority are: Turkey, Russia, France, Japan, South Korea, China, United Arab Emirates, Germany, Egypt, and India was the guest of honor in the 32nd festival. According to

the statics, the number of handicrafts in the festival was more than 300, the folklore exceeded 55 genres as well as 26 operettas. The national festival also implemented 306 popular and specialized intellectual seminars, 98 lectures and 78 literary evenings.

The number of invited intellectuals exceeded 10.000 and the participants and speakers were almost 1000 participants from all around the world. Moreover, the festival enriched the Arab library with more than 361 publications in the fields of heritage, culture, and arts. It also published more than 510 varied brochures accompanying the festival's activities.¹⁹⁶ (Saudi Press Agency, 2018)

6.4.1.3. Crafts (aṣ-ṣanā'i)

The national festival for culture and heritage, presents many scenes around the civilization of the Arabian Peninsula; which its societies were founded on the productive ideology that was associated with the concept of Islam that urges one to have a handiwork and do it squarely and efficiently¹⁹⁷. This ideology was invested and employed by the Muslims in China through the culture of (Halal/ legit) food and drinks. So, the constituents of culture that have a relation with the Islamic civilization must move toward finding a productive community either scientifically or practically in case it has been properly employed and invested. This kind of ideology explains the philosophy of many tangible and intangible heritage aspects that can be seen at the festival. The thinker Alsyd Wald 'Abah places emphasis by saying: Religion in the Islamic context still constitutes the deepest cultural base and the effective root in the social structure, and it has a dynamic effect on the general field; in contrast to the western secular communities that do not surpass the individual behavior and the distant symbolic background. It has no role in shaping collective values, it also has no influence on the public interest ('Abah, 2010, p. 137)

¹⁹⁶ There is a lack of highly qualified marketing through which to find the festival's written, audiovisual, gifts, antiques, cards, and the real artisans' artifacts in a dedicated place.

¹⁹⁷ Prophet (ﷺ) said, "No food is better to man than that which he earns through his manual work. Dawood (عليه السلام) the Prophet of Allah, ate only out of his earnings from his manual work". The Prophet (ﷺ) also said "Allah loves someone who when working, performs his duty in a perfect manner

So, during the researcher's visit to the festival, and during his studies of the cultural diversity and heritage prosperity, there is no exaggeration when he says that the production philosophy became more prosperous after the oil discovery and after depending on its financial incomings in all development matters. This situation has affected the practical and social way of life, to gradually turn from productive ideology and practice to the consuming behavior and ideology. To clarify this cultural and heritage prosperity, the researcher used 5 axes found by the Saudi intellectual Hind Baghfah¹⁹⁸ in her work "a nation's civilization "which are: " the folk codes, the folk crafts, folklore, the folkgames, and the folk fashion. This does not mean that there are no other axes, but we mention these only to clarify the richness of Saudi Arabian heritage today.

A. The heritage symbols and the national identity

Hind Baghfah states that the national symbols are direct and deep manifestations indicating the importance of the place, whether it was a street, a house or a building. But on the whole, it expresses the urban style that was shaped, formed and lived in the Arabian Peninsula for many centuries, whilst at the same time scoring a huge cultural and historical accumulation of extreme abundance and diversity. The researcher adds that the folk symbols are not limited to those only found in "the place" within the urban and architectural structure , but also include the heritage symbols in the crafts, industries, fashion, arts, food, drinks, desserts, etc. In this context, the researcher Zainab Al-Bayati is wondering "Is the process of communication with the folk symbols a repetition and adoption process to the previous symbol? Or a consolidation process to the public symbol under the cultural information and the national identity in accordance with the modern taste?" She concludes that understanding the symbolic and aesthetic value within the public symbols through the creative artists and the inspiring designers is not only repetition and adoption, but it is like an activation to the cognitive diversity and innovation capacity, to enrich the modern

198 Hind Baghfah a Saudi writer. She has been awarded the title of Saudi Heritage Leader by the Custodian of the Two Holy Mosques King Abdullah and King Salman.

taste in a way that serves the national identity and authenticity through the mental and visual contact between the ancient and the modern. (Al-Bayati, 2015) This affirms that the heritage symbols are a constant creator for the creative knowledge and renewed innovation if they were activated within the development strategies and the modern identity.

B. The handicrafts and traditional industries

The crafts and old industries that we regard as heritage today were means of production and living that took part in ensuring the tangible and moral needs of people. The craftsmen were able to utilize natural resources to serve men, which improved their intellectual abilities that resulted in many useful industries that are still used to this day in the Arabian Peninsula. The academic Mazen Matbakani says that man himself is facing human geniality that was able to accommodate life's needs using simple potentials. The industries in festival villages confirm that the society in the Arabian Peninsula has not fully recognized importing. In actual fact, this society was manufacturing many things¹⁹⁹. Matbakani is wondering that someone may consider these tools primitive! He adds, if we could create these tools back then why do we not do that today? Therefore, he is of the opinion that the industry is a very important matter and must be taken into consideration in case the society has not found all of these products that are currently flooding the markets from all over the world. He asks, wouldn't the industry have been created and produced just like it was by our ancestors? (Matbakani, 2004). The handicrafts, the traditional industries as well as the craftsmen must be considered a national treasure that exploit the resources, activate the industrial and the productive ideology and minimizes importing of everything.

¹⁹⁹, for example, there were many modern industries that are associated with farming and daily life, and fabric industries from camel fur and goats' wool that is associated with furniture and tent industries, and carpentry that reaches making ships that carry many Seamen, also every part of the palm tree was used for making various products.

C. Singing and folklore

One of these prominent arts is eloquence in the recitation of Arabic poetry the dialect in reciting Nabati poetry, singing in its varied keys, using traditional instruments and performing the various folk dances that reflect the characters of each area. Where the kingdom overflows with many types of folklore that vary according to its geographical diversity from the sea to the mountain to the villages as well as the agricultural flatlands, producing a large amount of public heritage that was found and formed by the circumstances during that period. Some of these arts are performed individually or collectively, they are also characterized by using various rhythmic sounds that come out either from the mouth like whistling or from the hands like clapping or by using the legs like treading on the ground, and the list goes on. Undoubtedly, this momentum of folklore in its fifth session managed to get the festival organizers to present an innovation that suited the spirit of the era, which is establishing the first national lyrical operetta that forms a civilized historical work containing singing and folklore scenes, and at the same time a work that is accompanied by huge media and techniques.

D. Entertainment and popular games

Hind Baghfah emphasizes that folk games are those games that are practiced for fun and they were developed through the ideas, behaviors, and ways of life. These games instill principles, concepts, and values as well as good habits and traditions, they also contribute to improving the collective work between children and youth. In addition, these games were common, they existed in many parts of the kingdom under different names, they evolved over the years as a result of life development, though many of these public games die out because of the thousands of electronic games. Baghfah mentioned 35 public games in her book, some of them are characterized by using physical and muscular strength that were automatically present in public games replacing sport. Many of these games and entertainment are no longer very popular and cannot be imposed on the modern era except by innovative tendencies.

E. Traditional fashion

Baghfir claims that the current men's fashion in Saudi Arabia has become almost standardized, which is a natural development when particular areas unite under a particular leadership. In fact, the areas of the kingdom are loaded with men and women fashion that suit the customs and habits of the area; men and women clothing in general varied and flourished because they had special regard in the Islamic nations, resulting in the fabric industry occupying advanced levels in the Arab Islamic civilization. The fashion industry was guided by religious orientation before it being a personal choice, this is because there are numerous constraints that were imposed on men and women fashion in a way that meets Islam, and this had led to creativity in fashion designs according to the Islamic law.

6.4.1.4. Knowledge (al-'ilm)

The national festival for heritage and culture is considered an important source of national knowledge as an Islamic civilization and Arabic identity, it contains an unmatched treasure of cultural and historical knowledge on Islamic and Arabic levels. This knowledge has accumulated during three decades of development and achievement that we have already explained part of it in the festival's history topic. Unfortunately, the festival's organizers have not given importance to this cognitive aspect similar to the importance they have given to the festival itself. Although, it has three prominent axes which are: an intellectual axis²⁰⁰, a practical axis²⁰¹ in addition to the festival's guests, an axis of states or people²⁰². All of these outputs would have taken a step in the development of Saudi Arabia if it had been activated as creative knowledge that could be used at the levels of designing,

²⁰⁰The festival is accompanied by many lectures and seminars of deep intellectual subjects that respect the global common tendencies and take care of the nation's issues especially the Islamic ones. Its subjects contain doctrine, legislative, political, economic and social matters etc.

²⁰¹The festival gives a prominent practical lesson through what the historical festival village contains like historical and civilizational sites, which emphasizes the importance of the Arabian Peninsula as an entity. As well as emphasizing its prosperity and beauty as cultural and historical diversity.

²⁰²The festival is considered rich due to the great intellectuals and scientists who attend it, and the prominent guests from all over the world.

creativity and creating intellectual, entrepreneur and competitive guidelines in extraordinary thinking.

Hereafter we review some studies that prove the importance of the festival as a creator of historical and cultural knowledge that can be used nowadays. Also, it can be used as a thinking stimulus for thinking outside the box to reach out new ideas based on the culture in various areas including art, designing, creativity, and business entrepreneurship.

A. The first study

Scientific research entitled Festival Tourism in Saudi Arabia: A Study of Image and Motivation of Participating in Janadriyah²⁰³ Festival for the researcher Bashar ArefAlhaj Mohammad. The purpose of this study is to understand the motives of visiting the festival by the Saudis in the view of the continuous increase in the visits the festival has enjoyed over the years. The researcher thinks that understanding the motives of the Saudis' visits to the festival helps the organizers and the decision-makers to formulate effective strategies that achieve competitive benefits for the countries. The researcher has put 20 motives that urge the Saudis to visit the festival, they were summarized within four motives:

The factors grouping of motivations that drive Saudi tourists is "Novelty with family", "Increasing knowledge", "Events and activities", and "Relaxation". Out of four underlying motives, "Novelty with family" is the most important motive for Saudi tourist to participate in Janadriyah festival. It obtains 6.93 eigenvalues and 15.86 % variance followed by "increasing knowledge", "events and activities", and "relaxation" simultaneously. (Mohammad, 2014)

This study found that the importance of knowing the factors that attract the Saudis to visit Janadriyah festival will help in recognizing the Saudis' tourist motives, consequently the best services and products that meet their demographic, social and psychological needs will be offered. Which will

²⁰³Janadriyah is the name of the place that hosts the national festival for heritage and culture, it is the original name that was used for the festival before the current name.

positively reflect on directing the tourist strategies in the state and designing its programs as well as making its sound decisions concerning improving it and working on splitting its markets. All of this will offers many job opportunities and minimizes foreign employment. In addition, the researcher concludes the importance of creating a trademark as a motive for the festival promotion in a better manner; as well as developing a database and the continuous contact with the festival's visitors. The researcher recommends conveying studies concerning the level and quality of interaction between the participants in the festival; he also recommends measuring the level of visitors' content after their visit and their opinion concerning the festival in general, this will be discussed in the second study.

B. The second study

Scientific research entitled; "Towards developing a model to assess the experience of visitors of the Janadriyah festival, Saudi Arabia" for the researchers Tarek Sayed Abdelazim and Abdallah Ali Alajlani. This study seeks to evaluate the experience of the visitors to the national festival for culture and heritage. According to the researcher the importance of this study can be viewed as follows:

The importance of this study is that it sheds light on the relationship between a number of variables (motivations, image, behavioral intention, and satisfaction). Hence, it helps festival organizers to better understand the participants' needs in order to fulfill them. It gives the guidelines for the festival's organizers on how to implement an effective strategy of quality depending on a deep analysis of festivals attendees' attributes. (Alajlani, 2016)

This study reached some results that reinforce the previous study and to some degree, confirm the motives that on the one hand urge the festival's visitors to visit it and on the other hand, it proves that there is a relationship between visiting the festival and the level of visitors' satisfaction concerning its program and its diversity, the employees' ability concerning quality and organization, the availability of public

transportation, absorbing park slots and their efficiency, food and drinks and suitability to the festival, etc. The researchers think that setting the requirements of visitors' content will help decision-makers to put strategies for improving the festival's level, the quality of presented services, the addition of new services and minimizing the costs of running, promoting and marketing the festival.

Some of the good results of this study presented important suggestions for improving the festival based on the primacy of this Saudi cultural and historical experiment and its importance to the touring market. Also, it presented these suggestions for improving the products in light of future aspirations of the festival's visitors from inside and outside Saudi Arabia within an area characterized by heritage and ruins diversity over the time. Some of these examples are: connecting the festival with a possibility of creating job opportunities and new economy, improving the festival's program and its infrastructure, finding a strategic plan for it based on: attracting more visitors from different areas of the world, increasing the awareness concerning the importance of cultural heritage, organizing training courses for improving the performance level of the employees who are responsible for organizing the festival, supporting the relevant scientific researches for enforcing tourism in Saudi Arabia, allocating an award to the best organization in the festival in order to encourage innovation and competition, increasing the interest in handicrafts for they represent an intellectual value for the local communities and finally giving the private sector more opportunities for organizing and managing the festival's activities in future sessions.

C. The third study

A master thesis entitled "Popular Arts Fashion and Accessories in Al Janadriyah Festival and Creating Modern Designs from It", for the researcher Halima Ali Mujahed.

The purpose of this study is clarifying the importance of recognizing the Arabian peninsula's fashion (Saudi Arabia) through the diversity of folkloric fashions that participate in the national festival for heritage and

culture. Additionally, working on improving them through creativity in accordance with the contemporary fashion schools enhancing the values of its authenticity which were shaped by the social, economic, geographic and historical factors of the Arabian Peninsula. The researcher indicates that most of the scientific research material has been collected through interviewing, observing and analyzing the folkloric bands that participate in the festival from all over Saudi Arabia. She also indicates that viewing the folkloric fashions on the ground and the way they are used is a source of inspiration for innovation and creation, because it is loaded with embroidery, ornaments, and colors that represent the traditions and the authenticity of their area. In addition, the researcher has found that the materials, from which these fashions are made, are another rich source urging toward renewed arts of fashion. As an applied perspective of this study, the researcher was able to create 45 different designs inspired by the folkloric fashion that suits the modern era; she achieved 14 models. She concludes her study saying that the national festival for heritage and culture has played a great role in finding the Saudi heritage and cultural knowledge, in a way that facilitates thinking for those who are involved and borrowing contemporary designs of a special feature that were shaped through the social, economic, geographic and historical factors. (Mojahid, 2009)

The important point in this study refers to the fact that the scientific studies concerning the national festival for heritage and culture are very few in comparison to the festival years that exceed three decades. Most of the information related to the festival are newspaper journals and media coverage, which do not underestimate or reduce the festival cultural releases that the researcher was unable to reach during his visit to the festival. The researcher reached the above scientific studies through an exhaustive search on the Internet, not through the festival's management and its importance. The studies prove that the festival is able to act as an important knowledge content that nourishes many scientific and creative ideas as well as the innovative trends or orientations. It can even be a prominent source for forming opinions

concerning the culture and heritage, and for recognizing the community's desires in addition to determining its priorities and its future aspirations.

6.4.1.5. Urban-Style (al-'umrān)

The compound of the national festival for heritage and culture is located in the northern borders of Riyadh the capital of Saudi Arabia within a huge agricultural/villages area called "Arrawda". In general, this area is considered one of the villages' entertaining areas that are frequently visited by Riyadh residents, it also contains entertainment compounds with huge spaces. This area which is still raw and developing is characterized by low population density. It is divided into smaller areas of various urban usages for example: "cultural and religious areas" an area in which the heritage festival village and its supporting services lie; "protected wells areas"; "Riyadh International Airport area"; "farmlands areas"; "Open areas at the city level"; "governmental usages areas" and "Oil pipeline areas" that comes from the eastern part of Saudi Arabia.²⁰⁴

At the level of location and accessibility, the compound of the national festival of heritage and culture can be reached through one road namely "Al Janadriyah" public road that passes along the western part of the village; this road is still considered its only dynamic entry. The compound alone is one of the most important landmarks in Riyadh, the King Abdul-Aziz Equestrian is 2 kilometers away to the north of the compound and The Thumamah National Park is almost 20 kilometers to the west of compound. And the King Khalid International Airport is almost 20 kilometers to the western part of the compound. King Abdullah Financial Center, King Saudi University, diplomatic Court (Al-Safarat), King Abdul-Aziz Historical Center and downtown lie to the southwest of the festival in approximately 50 kilometers.

At the level of urban and architectural planning of the festival, the researcher has not found documented cognitive information that shows the organizers' strategies in this context except what he has found through Google Earth,

²⁰⁴Digital Map of Building regulation and Land Use in Riyadh City.
(<http://rbrs.arriyadhmap.com/Amana/BuildingLaws/viewer.html#>)

in addition to the verbal information after interviewing the festival's deputy manager which can be as follows:

A. Urban Planning of Festival Complex

The compound of the national festival of heritage and culture can be divided into 5 planning components: 1) the heritage village with an area of almost 1,000,000 square meters, this will later be discussed in more detail in the urban section. 2) A semi-private area to the north of the heritage village that contains some constructions like stadiums for watching the camel race track, a residential construction dedicated to the VIPs and parking lots in a length of 700 meters and in a width of 65 meters dedicated to prominent guests and employees. This area is almost 500.000 square meters and more than half of it is still raw land. 3) Parking lot areas that lie to the west and south of the heritage village in an area that can be estimated at 1.500.000 square meters that is equal to the previous two areas. 4) Camel race track area which is an empty wide villages area and its detached space for the track is 3.500.000 square meters. 5) Raw empty spaces surround the festival's compound from the north, east and south, it is unknown whether it is within the ownership of "National guard ministry", the owner and the organizer of the festival. The festival manager mentions to one of the newspapers that the village space is 1.686.355 square meters and the current overall space is 172.485 square meters. [65] This space proves that the researcher's conclusions from Google Maps are correct to some extent if we assume that the village's space is number (1) and (2).

The researcher has not accurately reached the festival's compound development levels, but Google's history toolbar of Google Earth offers aerial photographs dating back to 2005 related to the festival's location. These aerial photographs show that the festival's compound has not changed in terms of the 5 planning components that were previously described. There were some limited additions and improvements on the first component in a way that meets the developing, supply and demand ideas of some participating authorities. The surprising addition in the festival's compound planning was in the third component, wherein the

parking lots space was increased from almost 100.000 square meters according to the aerial photographs in 2005 to 828.000 square meters in 2010; namely an approximate increase of 800 %. In 2014 a second space has been added, so the full parking lots space became, without the areas (1), (2), (4) and (5), almost 1.500.000 square meters; namely an increase of 665.000 square meters from the previous one, that is with an increase of almost 80%. There is a vast waste of land for the parking lots, even though Riyadh city has constructed a huge subway project up to 176km and with 85 stations in record time.

Surprisingly, the Riyadh subway project is yet to construct a station serving this enormous place, especially since its popularity is steadily increasing due to the fact that most of the visitors use their own personal vehicles to reach it. This is if we know that there are tendencies (this study is one of them) that suggest the improvement of the festival's idea and aspiration to be one of Riyadh's attractions as a heritage and cultural landmark, not only at the level of Riyadh city but also at the level of the kingdom, tourism, and visitors from outside the kingdom.

B. Urban Design of Festival Village

The heritage village of the festival falls in the middle of the festival compound's components (2), (3) and (4) which have been previously mentioned in the urban planning section. The village is surrounded by a wall that contains 6 gates. Three gates (1, 2 and 3) are from the west and three gates (4, 5 and 6) are from the south. Gate (1) is the main gate dedicated to prominent guests and employees, its special road is an honorific one that extends to the west until it meets Janadriyah public road and extends to the east. This road is considered the dividing line between the area of the heritage village (1) and the semi-private area (2). Gates (2) and (4), are considered to be the most important public access points to the heritage village, which make them heavily populated by visitors. The heritage village in its own does not follow a clear philosophical concept of urban design, this apparently refers to the absence of previous scenarios that determine how the village grows

within different visions at the levels of urban planning and design. The village's urban situation can be described as the following:

1. Traffic spots and parking lots

There are numerous traffic spots inside the village, and they differentiated as 2 types: the first type is called a street, while the second one is called a passage. There are almost 19 streets and almost 5 passages. The researcher does not know the adopted standards for naming the traffic spots as a street or a passage. However, there are numerous vacant spots resulting from areas where there is construction work and areas which are between walls. All these spots are without a name or a number. Although most of the streets and passages are used as pedestrian areas during the festival, they lack the standards of street designs that suit the festival's philosophy. For example, paving materials, street furnishings, the visual signs etc. have been a little neglected. Regarding the density of pedestrian traffic, it settles on two axes: the congestion on street number (1) which is the biggest; it travels in a straightforward way from southern gate number 4 which has the huge southern parking lots, until it crosses with the honorific road of gate number 1 in the western part of the village. The congestion on street number (6) extends in a straightforward way from western gate number (2) with western parking lots until it crosses with the northern part of street number (1) and that ensures smoother traffic flow as the visitors head to the south or north of the village. Regarding the parking lots, they undergo so much confusion and overlapping, they also lack good pedestrian spots and parking lots for public transportations. As a result, creative thinking is needed in order to organize and reduce the congestion in a way that makes the visitors become reliant on the public transportations, primarily via the access of Riyadh subway to the site of the festival. In general, the traffic and parking lots are not studied carefully in terms of planning and designing, additionally, there is an absence of an efficient "wayfinding" system that is on the one hand appropriate to the event,

and on the other, appropriate to the components of the festival's compound and the village's role.

2. The open areas and hierarchy of spaces

There are multiple open areas in the festival's compound, and they are at the same level as vastly open areas like the parking lots and the camel racetrack, others are at the level of limited empty spaces along the streets, between the buildings and inside the constructions of the participating authorities. Despite the existence of these kinds of diversified space in the village, there is no planning philosophy that is based on creating a hierarchical system for spaces connecting them and moving from the public space to the semi-public and ultimately to the private one within a creative link. This is the urban culture that the old Arabic and Islamic cities were famous for. Light transportations and accessibility for persons with special needs: The heritage village is incredibly large, but it lacks a light transportation system that serves those who need it; especially on streets number (1) and (6), there is also no light transportation that reaches the southern parking lots. Generally speaking, the heritage village and the surrounding parking lots need some kind of planning that considers its visitors with disabilities as well its older visitors.

3. Landscape and Architecture

The urban design and the distribution of constructions in the heritage village to some extent differs from the widely known scientific designing and planning standards. This may refer, as we've mentioned, to the exertion and effort of those who are responsible for keeping the village's development and making the urban decision. The manager's speech proves this "The first artistic activity was a lyrical operetta which was accompanied by some rain that helped in making a decision regarding building a hall to host the lyrical operetta and the poetic shows" (Nasser Al Harbi, 2018) Moreover, it proves that the Bahrain was the first country of the Arabian Gulf, participated in the festival; then other countries, such as Kuwait, the United Arab Emirates and more recently Oman applied for participation too.

Evidently, the village's development in this way needs urban scenarios to avoid random development, that does not suit the cultural value it offers. Before listing the village's notes, we will briefly list some percentages that were mentioned by the manager. He explained that "the number of governmental authorities was 56, and the percentage of permanent buildings was 33 %, the temporary buildings 14%, the green landscapes 6%, streets and pavements 10%, the internal parking lots and empty spaces 6%" (Nasser Al Harbi, 2018)

The urban and architectural observations on the village are for example, but not limited to: 1) There is no philosophy for determining the locations of the participating authorities, in a way that suits their roles and relationships with each other. For example, what is the relationship between the armed forces' exhibition in Aseer compound and the Ministry of finance at the public firm for retirement? Moreover, what is the relationship between the eastern parking slot, the General Authority for Food and Medicine, the ministry of energy and industry and the public firm for vocational and technical training? etc. 2) All the constructions like buildings, halls, and compounds have been dealt with separately, which is contrary to the idea of merging the Arabian Peninsula and its society, heritage and culture. As a result, all the participating authorities appeared as independent projects, each one of them was on an independent piece of land with independent approaches having nothing to do with their surroundings. 3) The supervisors of the village's buildings did not take into consideration that what distinguishes the kingdom's heritage and culture is its administrative division into 13 areas; Consequently, the village was supposed to be developed within this philosophy in the first place, followed by the participation of the other authorities in a way which supports this philosophy. 4) Parking slots, green landscapes as well as tree-planting did not receive enough attention, although farming and pasturage are part of the Arabian peninsula's heritage and culture. Unfortunately, the spots that have

been given attention like establishing green spaces and forestation are the areas that prominent personalities arrive at, especially street number (9) that includes the operetta, the honorific street extending from gate (1) right up until the public figure's compound. Some of the architectural designs of the village's buildings are very simple that they are nothing more than architectural boxes, while other buildings carry an architectural philosophy reflecting the kingdom's urban and architectural heritage to some extent.

Al Janadriyah compound and particularly the heritage village, need urgent development, and this cannot be achieved without the experts' view regarding the Architecture, Landscape Architecture, and Urban Design domains since they are capable of improving the current situation and building visions for the future through an architectural and urban philosophy that matches the strength of the cognitive content of the festival. The festival's organizers must also take into consideration the presence of urban heritage models from the Arabian peninsula's civilization, recorded in UNESCO for its social, aesthetic, architectural, urban and historical importance. So, they should be utilized at all levels in the urban development for Al Janadriyah festival, I'm particularly mentioning Historic Jeddah²⁰⁵ and Historic Ad-Diriyah²⁰⁶ as both were the core Saudi cities with international reputations.

²⁰⁵“Historic Jeddah is situated on the eastern shore of the Red Sea. From the 7th century AD, it was established as a major port for Indian Ocean trade routes, channeling goods to Mecca. It was also the gateway for Muslim pilgrims to Mecca who arrived by sea. These twin roles saw the city develop into a thriving multicultural center, characterized by a distinctive architectural tradition, including tower houses built in the late 19th century by the city's mercantile elites, and combining Red Sea coastal coral building traditions with influences and crafts from along the trade routes.”**Invalid source specified.**

²⁰⁶This property was the first capital of the Saudi Dynasty, in the heart of the Arabian Peninsula, north-west of Riyadh. Founded in the 15th century, it bears witness to the Najdi architectural style, which is specific to the center of the Arabian Peninsula. In the 18th and early 19th century, its political and religious role increased, and the citadel at at-Turaif became the center of the temporal power of the House of Saud and the spread of the Wahhabi reform inside the Muslim religion. The property includes the remains of many palaces and an urban ensemble built on the edge of the ad-Dir'iyah oasis.**Invalid source specified.**

6.4.1.6. Life-Style (al-ḥaḍara)

According to the three cultural levels that the researcher has derived from Ibn Khaldun's philosophy as a methodology to evaluate the outcomes of a specific issue as it goes through a positive cultural content or a negative secondary one, and linking this content with the religious, historical, cognitive and physical analysis that revolves around it. Since this study has reviewed the Saudi national festival of heritage and culture, and through my readings, many of those who had written about the festival, described it as the bridge that on the one hand links the past of Arab-Islamic culture to its present and future, and to the cognitive content that allows the visitors to taste the Islamic values and the Arab authenticity and expand the center of attention on them through a realistic simulation to the culture and heritage which promotes thinking and reflection. The book of "Janadriyah" shows the importance of the festival as: a genuine achievement as through its details seeks to bridge the gap between the simple crafts of the past and today's developing technology in a short period of time that extends for two weeks... summarizes their history and the heritage and weaves it in a unique creative way that serves human memory which must be present and ubiquitous in the culture of the Saudi individual. That is because the knowledge of the past is not a luxury knowledge but an urging necessity" (Mohammed Babli, 2013, p. 19)

The researcher thinks that the initiative of the national festival for heritage and culture is considered as one of the smart techniques that arrived at an opportune time three decades ago, to highlight the components of the Arabian Peninsula civilization, not as divergent communities in the middle, north, south, west, and east, but as a single society with one essence, one religion, and one state. This philosophy is within the positive civilization that Ibn Khaldun talked about in understanding history and benefiting from it as well as applying it to real life situations. Saudi Arabia kingdom, its government, and people do not believe in dividing people on the basis of race or region, but they believe that the relationships between them meets under the values of Islam and the generousities of Arab authenticity. So, if one wants to live in the society of Saudi Arabia or work with its people, then

one must respect these two rules and never break them with concrete or moral ideas that do not agree with them.

The festival was important for saving, keeping, glazing and protecting the folklore from neglect. It also provided an idea about the impact of religious and social values throughout history on the customs, traditions and daily routines of the Arabian communities. It also tried by all means to highlight the relationship between the folklore and the cultural achievements that the kingdom of Saudi Arabia witnesses, within the intellectual and physical potentials of the organizers, to motivate people who seek artistic and literary creativity, and a life for people who have innovative imaginations in creating new things through thinking and reflecting. The festival, definitely, became an important cognitive source for whoever wants to know more about the culture and heritage of Saudi Arabia through traditional knowledge like symposiums and lectures, or interactive knowledge including simulation, interviews and exploring. The festival has shown a great deal of good manners to the Arabian communities: Gallantry, generosity, patience, taking responsibility, fighting against village brutalities, self-reliance, respect for the elderly, appreciating the young, benevolence and giving the Islamic religion the priority in all aspects of social, educational and practical life. The festival has allowed people to know more about the ancient capabilities in using the available natural local resources and adapting them to their needs and maintaining their sustainability. We can say that in the previous three decades, the festival has attempted to inform people of the hereditary folklore like culture and heritage, depending on concrete and tangible stuff in order to make the image clearer and deeper for the visitors, learners and researchers. Furthermore, the festival has not only historically attempted to, but still attempts to present the past sincerely, all thanks to the organizers and the sponsors.

However, it is worth mentioning that the festival's current approach in continuing to deliver the past, and as we live in a new century full of cognitive, technical and technological knowledge, will make the current and future generations perceive that the authentic values of the state and its unique identity and the products of our fathers' and ancestors' minds, are

abandoned around the folklore and the old heritage, creating the impression that the folklore and the heritage are fixed data that does not develop, nor produce new creative and innovative information, which is not true because the Janadriyah proves that the community of Saudi Arabia kingdom has a vast cultural and heritage accumulation. This accumulation is varied and includes religion and values, customs and traditions, handicrafts and traditional industries, singing and musical instruments, fashion and plastic arts, literature and eloquent and Nabatean poetry, dancing and popular games, camel races, chivalry and falconry, etc. All this can be a base from which the new generation could start off toward a contemporary productive culture that is still full of authenticity.

6.4.2. The Level of Cognition

The transformation from the level of cultural knowledge to a level of cultural cognition through three analyzing criteria: first, formulation of concepts and cognitive ideas within a proposed definition. Second, suggesting an approach to activating the proposed concept through developmental goals that meet the requirements of the current and future requirements. Third, using the interaction between the proposed concept and the cultural approach for discovering a creative productive model that could be applied and made use of:

6.4.2.1. The concept

According to Paul Schafer's culture definition²⁰⁷ which is adapted to this study as stimulus for finding thoughts that support innovation based on culture through the six axes of knowledge which have been gathered concerning the cultural and heritage issue, so in accordance with it, we can formulate the issue of the national festival for culture and heritage as the following: The Saudi Festival for Culture and Heritage: it is a national initiative launched in 1985 to serve as a core for a growing system of cultural and heritage knowledge and experience, which the Arabian Peninsula is loaded with before and after Islam. Thus, the festival with its tangible, noticeable, functional and visual aspects serves as a national cultural

²⁰⁷ ,Culture is "an organic and dynamic whole which is concerned with the way people see and interpret the world, organize themselves, conduct their affairs, elevate and enrich life, and position themselves in the world".

knowledge (organic) with a historical depth and a spatial diversity that includes 13 administrative regions of Saudi Arabia, most of which differ in their cultural and heritage data, but all of them are gathered under the values of Islam ²⁰⁸and the originality of the Arab-Islamic civilization. According to this original cognitive content, the festival offers a new cultural concept that can be invested in exploring the scientific and practical elements of the implicit and explicit knowledge that motivate creating innovative entrepreneurship models (dynamic). Whenever the festival is driven towards creative thought and innovative behavior, it will produce generations of professionals with multiple intellectual and creative levels capable of absorbing and developing a great deal of the data related to the history and civilization of the Arabian Peninsula, which can be transformed into products, services and theories bearing the national identity in accordance with contemporary taste and global competitiveness.

6.4.2.2. The approach

When the researcher chose the festival as an initiative based on highlighting and keeping culture and heritage, he was certain that the festival, with its lengthy period over the last three decades, is still in the initial stage "as an idea or a concept." The initiative did not evolve over time to become a "civilized center or a sustainable, creative, national and developmental project" that promotes the human, urban and cultural development of the Kingdom of Saudi Arabia scientifically and practically and establishes a competitive Islamic economic theory that goes in parallel with the current oil economy. In other words, the Festival "as a concept" has succeeded "morally" in collecting and highlighting many of the cultural and heritage assets of the Arabian Peninsula. It has also succeeded "physically" in spatial expansion to become a seasonal cultural and heritage village attracting

²⁰⁸"When the heritage activities of the parts of Saudi Arabia are combined in one place, you see the heritage of the north near the heritage of the south beside the east and the west, then you feel the pride of this great unity. You are the pride of this great religion which make the whole Muslim nation one nation as Allah Almighty said: (And this is your nation, one nation, and I am your Lord, and you shall worship). Remember those verses that call for unity, and one of them His saying: (And hold on to the rope of Allah all, and do not divide), (Do not fight, and you will fail, and your wind will go) because what gathers Muslims together of the factors of unity is not found in any other nation or people. "says academic MazenMottab afani [64]

millions of visitors. However, the festival in fact still needs a creative developmental thought, and innovative behavior orientation, that promotes the festival to be within the rhythm of the current age based on the knowledge economy, innovation, invention, and design. This "qualitative shift" of the festival can only be achieved through activating the three previous approaches to culture and benefiting from the case studies that have been reviewed, as they are a complement to this conceptual entry/concept. We are content here with presenting an idea concerning the importance of the other approaches in terms of upgrading the festival. We will clarify them in the remaining sections of the thesis:

- The institutional approach to culture and heritage: is promoting the development of culture and heritage by governmental and private companies, institutions and bodies, that participate in the festival, by adopting creative stimuli that promote toward a positive and interactive growth of culture and heritage, through the responsibilities and capabilities of these institutions at the organizational, legislative, legal or financial levels.
- The practical/applied approach to culture and heritage: is developing the concept of culture and heritage by raising the productive creative taste of the festival community like the visitors, craftsmen, artists and businessmen, etc., by activating the innovative behavior among them to come up with new practical/applied models emerging from developing, reflecting and exploration, covering people's lives in some areas of contemporary life, and linking between the past experiences, the present date and future aspirations.
- The theoretical approach to culture and heritage: is activating the concept of culture and heritage by focusing on in-depth knowledge, interactive education, field studies, and scientific research, in addition to exploring and documenting indigenous models of community life through individuals and material and moral products. This approach will result in a large, varied and accurate information base that will help to understand the development of culture and heritage in accordance with the originality of the Arabian Peninsula and the

kingdom of Saudi Arabia contemporaneity, which will prompt interested researchers, innovators, inventors and designers, etc. to develop renewable concepts and ideas linking the past, the present and the future. For example, this approach will provide us with philosophical knowledge about: Endowments in Islam and their relationship with culture and heritage; the integration between the Bedouin/rural and urban/civil societies and how each of them was an extension of the other; the interaction of religion with customs and traditions; the concept of business and industry production in the original Islamic Arab mentality, the concept of modesty and luxury and its relation to the trade and construction in the Arabian Peninsula; the concept of the relationship between the ruler and the construction and the effect of each one on the other either positively or negatively; the concept of collective cooperation between people at the social and industrial level; the concept of the collective collaboration between people at the social and industrial level; the concept of utilizing human and natural resources and maintain their sustainability; the concept of the five essential purposes in Islam which are: religion preservation, self-preservation, mind preservation, offspring preservation, and money preservation , and how they interacted/interacting with culture.

All of this makes festival organizers need two qualitative shifts: The first, is the thinking that motivates tasting culture and heritage as sources of exploration and innovation. It cannot be created without working by the concept of apperception. The second, is the performance that is capable of transforming thought into competitive outcomes and cannot be achieved without finding the behavior based on augmentation. So, we need developmental leaderships capable of reaching and investing in both creative thinking and innovative behavior.

6.4.2.3. The model

We have concluded that the National Festival of Heritage and Culture urgently needs to develop the creativity ideology/thought using Intellectual mechanisms based on apperception not only on perception. Developing and

designing innovation behavior with the participation of all the organizers, participants, and visitors, using augmentation-based mechanisms not only revivification or exhilaration. In order to be able to create a developmental model of the festival that takes into consideration this approach, it was necessary to think about the methodology of the scenario, where it is one of the best methodologies through which we can draw the attention of development decision-makers in Saudi Arabia to the great benefits that the country can gain through activating the festival at the level of creativity, innovation, and design. In order to establish an effective developmental model based on culture and heritage through this scenario, we have to deal with "driving forces and critical uncertainties", both of which cannot be known if we do not ask some questions such as 1) Does the festival adopt developmental goals based on promoting creativity, innovation and designing in the field of culture and heritage? 2) Is the festival keen on establishing an interactive database directed toward cognitive investment in the field of culture and heritage? 3) Is the festival relationship with the country based on national motives driven by the ideology of originality and richness of the past, or developmental motives driven by contemporaneity ideology and the knowledge richness for building a new civilizational model, combining the richness of originality and the requirements of contemporaneity? Based on this, the researcher reached three scenarios that will be discussed in the next section: 1) Economic scenario motivated by (culture and heritage use for the requirements of tourism and diversity of the economy). 2) A national scenario motivated by (promoting culture and heritage in order to highlight the originality and reviving its heritage). 3) A developmental scenario of its motives (developing culture and heritage in order to create a modern contemporary civilized model). These scenarios seek the best future model for the festival that considers both culture and heritage as knowledge, culture and heritage as motivation. However, both of these concepts must interact with the information system like religion, history, work, science, architecture and civilization.

6.4.3. The Level of Interaction

The interaction level is a tool of synthesis the level of cognition. The aim of this synthesis is creating, innovating or designing modern products and presenting services with identity. The application level requires arranging of priorities based on the realm of things we need, the realm of people leadership or the realm of creative and the best ways of thinking:

6.4.3.1. The things

Saudi Arabia is rich in things related to its culture and heritage, both material and moral. For example, the General Authority for Culture divides Saudi Arabia's official culture into five sectors: the literature sector, film and content sector, theater and performing arts sector, music and visual arts sector. The content of all these sectors has its identity and privacy that should contribute to the Saudi developmental process by motivating its development and sustainability as a renewable culture resource, encouraging creativity and innovation, exploring and supporting talents, promoting and supporting cultural diversity and social cohesion. (General Culture Authority, n.d.)

The social Commission for Tourism and National Heritage in Saudi Arabia, in addition to its internationally recognized tourism duties, is responsible for managing and activating the four most important resources that have a great relationship with the history, civilization and heritage of Saudi Arabia which are: monuments, urban heritage, handicrafts and the cultural heritage program of Saudi Arabia. The location of the KSA, which is the Arabian Peninsula, is loaded with an unmatched history in the world. The Peninsula has a history of civilizations dating back to thousands of years and is known and preserved in manuscripts and history books, but what makes the Arabian Peninsula a special place is the western region where the holy cities of Mecca and Medina, and from there the heaven and Earth have connected where the sky was connected to through many of the doctrinaire aspects that Muslims believe in. Because of the pre-Islamic and post-Islamic civilizations, the Kingdom of Saudi Arabia has highly valuable monuments and archaeological discoveries that impressed the world. In addition, Saudi Arabia has a diverse original urban heritage that differs from one region to

another, to reflect the ancient culture of each region, materials, and equipment used in construction. Just as most of the construction in the Asian countries is of wood because of forests, in Saudi Arabia the case is different and the construction there is buildings that have been built of mud and others have been built of stone and a third type built of sea rocks and so on. Saudi Arabia also contains a large number of ancient handicrafts that encompass all aspects of life as they are directly related to the social life of the people who inhabited the Arabian Peninsula a long time ago. Some of these traditional crafts and traditional industries are: textile and saddle industry, fiber and cage products, leather products, rosary industry and precious stones, perfumery and rose water industry, patterns of paper and wood products, brass work and vases, ship building, nets and fishing tools, metal and metal products, the manufacture of white weapons, carpentry and wood products, pottery and stone products, and the manufacture of silverware and ornaments of all kinds. The cultural heritage program in Saudi Arabia is considered one of the most important initiatives that achieve protection, knowledge, awareness, attention, rehabilitation, and development to the components of the national cultural heritage, making it a part of the life and memory of the citizen, emphasizing on cherishing it, activating it within the daily culture of the community, achieving a qualitative shift by taking care of it, and linking it to the tourism industry, which contributes to the overall economic development. (Saudi Commission for Tourism and National Heritage (SCTH), n.d.)

Out of this brief introduction, we can conclude that Saudi Arabia does not lack the material and moral resources that have to do with civilization, culture, and heritage, through which it can move toward new horizons of creativity, innovation and design.

6.4.3.2. The thinking

National Strategy for Handicrafts²⁰⁹ Development is one of the outstanding Saudi initiatives that proves that Saudi Arabia has massive competitive

²⁰⁹The concept of crafts and handicrafts in Saudi Arabia "is the activities that craftsmen carry out using natural raw materials available in the local environment and turning them into products of various benefits, which contribute to providing some of the societal requirements in general and for tourists in particular

ideas to activate culture and heritage as a national development by the Supreme Commission of Tourism and National Heritage. The strategy aims at creating renewable channels for cultural diversity associated with economic diversity based on knowledge economy, the most important of which is the development of innovation, creativity, and talent. The strategy is characterized by two things. The first is the participation of numerous government agencies, attracting the private sector as investors and opening up the creative and innovative space for the interested parties. The second is financing the national crafts and industries through joint-stock institutions and SME financing and support programs. The strategy is accompanied by a national program for the development of handicrafts called BAREA, its vision is to develop the handicrafts sector in a balanced and sustainable development that achieves cultural diversity and economic richness that can be achieved at three-time levels: a close term (2013-2017) includes approximately 48 projects. An intermediate term (2018-2022) includes approximately 42 projects, and a long term (2023-2027) includes about 25 projects. [71] The program is an ambitious and professional project for preserving the old Saudi manual and industrial heritage, developing it, and achieving innovation through it. The activities of this program focus on the manual and intellectual skills of craftsmen with the help of some tools and necessary equipment. The importance of this program lies in four points: 1) the cultural and civilized importance that represent the preservation of the nation's cultural identity and national origin because these crafts and industries are inspired by the heritage of each nation. 2) The social importance of these handicrafts and industries' abilities to create jobs for all societal groups and reduce unemployment and migration. 3) Economic significance, where crafts and handicrafts contribute to national production, economic development, and to generate additional income for citizens. 4) The tourism significance, as crafts and handicrafts attract tourists to acquire them, and activate the movement of festivals and cultural events, and also to enjoy watching the artisans as they perform their crafts. The national program for the development of crafts and handicrafts will have many achievements, the most important of which are the establishment of

permanent places for craftsmen, awarding prizes for creativity and innovation in the field of crafts and handicrafts, the work from home in crafts and handicrafts, cooperation with trade centers for the display and marketing of these crafts and handicrafts, the implementation of state official gifts of national handicrafts, protecting the handicraft trademark, and finally encourage investment in the crafts sector in any region of the Kingdom, etc., compatible with the three temporal plans above.

This exclusive instance (National Strategy for Handicrafts Development) confirms that Saudi Arabia has great intellectual mentalities that are fully familiar with its culture and heritage on one hand and are able to absorb the progress of knowledge and benefit from the experiences of other nations' cultural and heritage on the other. This goes in line with what Paul Schafer points out to, that on the one hand there are factors to activate diversity based on people's knowledge of the culture of their communities, and to recognize the creative achievements of other societies on the other. This confirms that Saudi Arabia, as it does not lack cultural and heritage resources, does not lack creative intellectual potentials to assert its ability to move toward new horizons of creativity, innovation, and design.

6.4.3.3. The people

In the previous two matters, we concluded that Saudi Arabia possesses great cultural, civilized and heritage resources. It also has the intellectual capacity to create innovative systems in all fields. However, it seems that there is a problem in activating and investing these resources and ideas about them because of structural weaknesses in the formation of a competencies system capable of development and change freely without the pressure of patriarchal authority that sees itself as having the absolute right for acceptance, rejection, gratitude, and reverence. We can say that the National Festival of Heritage and Culture is one of the cultural and heritage resources that Saudi Arabia possesses, and with the existence of intellectual mechanisms that can promote the festival, but it has been going on in one style for three decades. Khalid Al-Khalifa says that a cultural project at the level of the National Festival of Heritage and Culture, like any human activity, is exposed to passing through times of strength and

weakness, renewal and repetition. Therefore, the problem lies in the fact that those who completed this project were not in a position to overcome the stages of weakness to stages of strength and to skip the sites of repetition to sites of renewal. It is therefore proposed to develop the festival in accordance with the needs of the age by setting new competencies and ideas .[66] "The idea, philosophy, and spirit of the festival must be transferred to new areas that simulate and reflect future aspirations," says Abdul Aziz Al-Jarallah. [67]One of these is the transformation of the festival into an ambitious economic and tourism project, says Ahmed al-Jamia. [67]Or to involve an investment company, which includes the private sector as well as the relevant government sectors aimed at investing the various programs of the festival, to become marketable on a large scale, according to Ali al-Shadi. (Ali El Shady, 2017)Abdulrahman Al-Sheikh explains that in order for such trends to succeed, the festival must gradually move to the private sector through the work and institutional organization, including financial, organizational, informative, marketing, and commercial. (Abdulrahman Al-Sheikh, 2017)Abdullah Al-Mazhar points out that the festival, after three decades of its existence annually, has no documented knowledge content through a comprehensive and appropriate website that contains a real and integrated archive of all information and events of the festival over the past 30 years. (Abdullah Al-Mezher, 2018)Finally, Abdullah Al-Jaithin said that the weakness of the national festival is its short duration, overcrowding, the lack of regular means of transport, and training programs on crafts and professions. (National Festival of Heritage and Culture, 2017)There is a great deal of literature, articles, and interviews about the importance of developing the festival to support and promote development, as well as a competitive platform for competencies of innovators and designers.

In all cases, the researcher respects all opinions and ideas that have been raised by writers, intellectuals and interested parties and are still being raised concerning the festival. The most recent is the proposal of the General Authority for Tourism and National Heritage and the Ministry of National Guard (the organizer of the festival) to run the National Festival of

Heritage and Culture "Janadriyah "throughout the year to contribute in revitalizing tourism and economy. (Mzmz newspaper, 2018)

Therefore, the researcher believes that the priority for activating the cultural and heritage resources available in Saudi Arabia, including the National Festival of Heritage and Culture is to reach out for the competencies that can transform the festival into a cultural center and a national development project product, working throughout the year as a platform to generate creativity and innovation based on Islamic identity and Arabian originality. The festival must be handed to minds that believe in the culture of design and innovation thought, not the culture of the thought of reproducing and imitating the old. Therefore, the thinker Mouhammad Abid Bakhotmah²¹⁰ believes that any Saudi development orientation related to culture and heritage should be based on local and global experiences for the purpose of establishing a "civilized model" formed through a "cultural renaissance" rather than a "cultural leap", this renaissance considers the four most important Saudi developmental issues discussed previously: 1) limited qualitative economic diversification of the Kingdom of Saudi Arabia. 2) The obstacles facing the Saudi society and its institutions in building the knowledge society and economy. 3) The weak activation of innovation, creativity, talent, and design within the daily Saudi scientific and practical life. 4) Culture and heritage as a renaissance and not as a mutation! (Bakhotmah, 2010)




In other words, we need the leaders and competencies whose ideas support creativity, and their behaviors enhances it. And those who always have the ability to: First, imagine culture and heritage from multiple angles, based on analyzing, organizing, and installing of varying information. Second, dealing with culture and heritage as a reality full of harmony or contradiction, which needs a bold thought that invests this reality and translates it into products with alternatives that fit the needs of contemporary society. Third, to

²¹⁰ Mouhammad Abid Bakhotmah, a Saudi Professor, surgeon, writer, thinker. He specialist in the ethics of medicine from the Islamic perspective and its applications in the field of culture of perfection and the quality related to the rights of patients and the ethics of professional fellowship. Interested in the historical impact of social on culture. He has multiple books.

generate new outputs of culture and heritage by exploring them with unconventional thinking and asking questions that are not routine or repetitive. Fourth, cooperate and show flexibility in accomplishing tasks. The achievement today is not as it was in the past, with only guidance and instructions within a static vertical sequence, but a rather flexible horizontal interaction that combines numerous multidisciplinary entities, skills and thinking skills away from authoritarianism and central decision-making. Fifth, to push for the constant enthusiasm to make culture and heritage renewable resources for creativity and innovation and to remove all that distracts this enthusiasm by frustration or destroying ideas or bold innovations in the stages of composition.

6.5. Interpretation of observational studies with culture components, approaches, and knowledge

The study's hypothesis has stated that culture can be dealt with through cultural components, cultural approaches and cultural knowledge either explicit or tacit knowledge. However, this way makes culture more explorable and diversified, thus enhancing the creators, innovators and designers as well as encouraging them to be more interactive with culture and heritage. The following table is an attempt to summarize the most important of the four observational studies and determine the best approach to augment the topic.

Hypothesis 1, institutional cultural approach motivates culture system	Hypothesis 2, practical cultural approach highlights culture pattern	Hypothesis 3, theoretical cultural approach revives culture element	Hypothesis 4, conceptual cultural approach contemplates culture components
Observational study 1: Understanding culture as a system in Hong Kong design development	Observational study 2: Understanding culture as a pattern in Xi'an Muslim Cuisine concept	Observational study 3: Understanding culture as an element in Chinese Kesi silk revival	Observational study 4: Understanding culture as a component on Saudi national festival for heritage and culture
 Culture Components	 Culture Approaches	 Culture Knowledge	
1. The cultural system in Hong Kong is invested in its development, which suits its knowledge and service-based economy, and strengthens its position as a distinguished center for freedom of religion and belief. This reality provides its society with a good level of equality in opportunities and services.	1. The interaction of Muslims in Xi'an shows that the culture of the Islamic religion with its constructive civilization and interactive culture qualifies as a source of social innovation in general, and particularly innovation based on culture and heritage. This is because Islam has outputs that are suitable for	1. (Kesi) is a term that refers to one of the oldest traditional crafts in China that enjoys high technical aspects in terms of production and high social status in terms of use.	1. There is no doubt that the discovery of oil in Saudi Arabia in the first third of the twentieth century had a great impact on sparking an unprecedented revolution in the field of economy and development that caused major changes in Saudi society, its customs and traditions.

	every time and place if considered outside the box.		
2. Despite the variety in cultural styles, elements and themes in Hong Kong, its general cultural system retains it within the authentic Chinese identity.	2. When the nucleus of Chinese Islamic society first settled in China a thousand and three hundred years ago, it did not close isolate itself, nor did it abstain from Chinese culture, but rather contributed to it, and thus enjoyed a reciprocal beneficial relationship. The Halal Cuisine is but one output to be contemplated and used as a source for many ideas.	2. The quality of the (Kesi) fabric depends on the skill, experience, accuracy, patience and sensitivity of the artisan in dealing with hundreds of silk threads gradient in color and gold and silver threads, if necessary.	2. The social transformations resulting from the oil boom endangered the cultural heritage of the Kingdom of Saudi Arabia. This reality prompted King Abdullah bin Abdul Aziz Al Saud to adopt an annual festival to spread awareness among people about their heritage and culture and to balance the state of great openness to the world in all fields while taking pride in Islamic identity and Arabian authenticity.
3. Hong Kong endorses the ancient Chinese philosophy of the Feng Shui. However, it cannot be limited to the designs of buildings as it is (according to the researcher's opinion) present in the everyday life of people.	3. The Arabs said a long time ago, "Seek knowledge, even in China." This view of science and work in Islam made people realize that Islam is not only a religious belief but also a system of daily life rich in values and morals and a catalyst for progress and prosperity. As a result, Islam in China reached a prestigious cultural rank by interacting with authentic Chinese culture, thus highlighting each other's beauty.	3. It is amazing how Islam greatly honors silk in terms of clothing, grants it special status in terms of aesthetics, and dedicates for it compulsory social legislations among Muslims wherever they are, although it is a discovery that has been known for thousands of years on a land thousands of kilometers away from the cradle of Islam.	3. Al Janadriyah festival is one of the most beautiful philosophical examples of the integration of values of religion and the culture of the society and its heritage. This is reflected in two dimensions: the Islamic dimension of the explicit theme of the festival, and the implicit dimension in the practical themes that the festival highlights.
4. The cultural system in Hong Kong prompts those responsible to ensure that it has a comprehensive developmental structure in terms of services, parks, social and sport spaces, and playgrounds for children and the elderly, etc... Such a cultural system of development interacts with individuals, society and institutions.	4. Muslims in China were distinguished for six cultural aspects that qualify to be among the foundations of social innovation: I. They moved from a narrow perception to a wide apperception by proving that they are a productive nation. II. They moved from frustrating stagnation to brilliant expansion, where they were the pioneers of enabling the most important factor in the ruling party's strategy, which is manufacturing. III. They moved from	4. It is as if God the Creator of the universe wants to tell us that a small worm within the stages of its development towards being a small butterfly that lasts only a few weeks can be a source of power on earth, creating cultures and civilizations, even economic secrets protected by the strictest human laws and regulations.	4. The festival proves that the philosophy of production based on the ideas of society in the Arabian Peninsula was richer than it is after discovering oil and relying on its financial income in all aspects of development. This situation influenced the social and practical lifestyle, gradually shifting from production to consumption.

	<p>traditional interaction to modern interaction. IV. They moved from individual interest to community interest. Alcoholic drinks, for example, were banned by consensus of the restaurants and food and drink businesses owned by Muslims because alcoholic drinks are not compatible with the Islamic belief. V. They moved from financial gain to entrepreneurship. Muslim Chinese proved that old customs and traditions are not retroactive but can be a major economic and developmental source within the law. For example, from the government point of view, Islamic foods and beverages (Halal) are considered as foods belonging to national minorities. From the Muslim point of view, they are foods that carry religious principles, beliefs and values that cannot be compromised. VI. They moved traditional creativity to innovation and design. No one but Muslims has the keys to competition (in Halal) because it is not a purely material domain. (Halal) manifests in many moral aspects that are understood only by educated and knowledgeable Muslims who are keen to maintain their religion and the responsibility with which they are entrusted in regard to the Islamic faith in general and (Halal) in particular.</p>		
5. The cultural system in Hong Kong prompts the society to have an interest in design and fashion, maintaining health and proper nutrition,	5. The negative view of the urban situation in the Muslim neighborhood of Xi'an is the result of the lack of urban development that is based on the	5. Islam granted silk a high status and value that is not evident in any other beliefs, civilizations, cultures or societies throughout history and time.	5. Over the span of three decades, the festival gradually interacted with many cultural and heritage elements that spread across the Kingdom of Saudi

as well as commitment to responsibility and hard work. All of these ideas are instilled in the students during their educational years in order to develop into habits, values and a way of life.	region's historical components and the religious (national) requirements of Muslims		Arabia geographically and historically, even before the emergence of Islam. It expanded to become a heritage cultural tourist village with an area of approximately 1.5 square kilometers.
6. The cultural system in Hong Kong pushes the new generation towards crafts and entrepreneurship as well as gaining experiences from entrepreneurs in various fields. We pointed out the idea of Elaine Ann and the importance for the community of entrepreneurs and innovators to benefit from the legend Bruce Lee. Another example is when Chi Wing Lee was able to professionally integrate the eastern culture of drinking tea and the western culture of drinking coffee in one of his designs.	6. There is a difference between judging the cultural system of Muslims in China through the institutional approach, which views religions, cultures and heritage from an organizational and political perspective, and judging it through the practical realistic approach, which views the culture of Muslims and their heritage as the product of religion and moral values.	6. The researcher could not find an explanation that highlights the scientific miracle behind God's choice of silk as a material for the clothing of people in heaven. However, I think that the interpretation of the Quran by Sheikh Mohammed Metwally Al-Shaarawi over the years established a creative thought, which is worthy of contemplation by creative thinkers. The Sheikh says, "When God speaks to his worshipers through the Holy Quran about the blisses of heaven, which is one of the unseen things that only God knows, two matters are always present. First, the verses about heaven and its bliss urge people to engage their minds and imaginations to generate innovative ideas for the construction of the earth in a way that promotes creativity, innovation and design. Second, the Sheikh says that in order for human beings to comprehend the status and bliss of heaven, they must have knowledge about what it means. Therefore, God used analogies for the unseen with the names and qualities we know. However, despite this analogy, there remains a continued miraculous content.	6. The festival presents many scenes about the Arabian Peninsula civilization, which was tied to the religious concept that urges work and mastery. This same characteristic distinguished the Muslims in China through the culture of (Halal) food and beverage.
7. The first car made in China is considered an important knowledge	7. There is a creative and innovative aspect that was not enabled in	7. There is a great significance in reflecting about the relationships	7. Highlights of the festival include heritage symbols, national identity,

source for proving the strength of Chinese culture in competitive development that prioritizes the generation of ideas, building competencies and creating items. This makes it an ambitious model to motivate the new generation to learn from the determination of their forefathers who had nothing but their skills and willingness.	China alongside the scientific progress and developmental prosperity it witnessed, which is the aspect of Islamic outputs throughout history that created an innovative Muslim Chinese society that encourages creativity and acceptance of new ideas.	between the properties of matter, place and human, and the importance of their overlap and harmony to reach the desired goals through the best solutions and discoveries.	traditional handicrafts and industries, singing, folklore arts, entertainment, popular games and traditional costumes.
8. The vitality of knowledge strengthens the culture of Hong Kong and is supported by the organism of innovative ideas, the quality of projects and the presence of leading figures who embrace eastern and western thought.	8. Visiting the Muslim neighborhood of Xi'an is a scientific and practical cultural opportunity to contemplate a historical place that dates back to more than a thousand years ago. This gives those interested the opportunity to be acquainted with plenty of heritage creativity both material and moral.	8. Silk proves that it is a huge mistake not to take religion and values seriously when considering sources of knowledge for innovation and modern design in general, particularly those related to culture and heritage.	8. The festival is an important source of national knowledge that is based on the Islamic civilization and the Arab identity, which is reinforced by the intellectual and practical aspects of the festival.
9. The system of cultural life in Hong Kong is a mix between cultural microelements and cultural macro elements.	9. One of the most prominent features of the Muslim neighborhood in Xi'an is the mosque, which serves as a nucleus for daily and social life. It is connected to the market as a center of work and housing as a center of stability and tranquility.	9. The technique of this craft is generally referred to in English as tapestry, but this term is not related to the material used in this craft, namely silk. In other words, if wool, cotton, synthetic silk or any other material is used instead of natural silk in the same technique, the English term remains the same. However, what distinguishes the Chinese term from the English term is that tapestry and natural silk are related in the formation of the Chinese term in one way or another. This is an example of cultural and heritage details that must be observed when dealing with culture and heritage.	9. Scientific research on the festival is considered to be insufficient compared to the number of years that the festival has been running for, which exceed three decades.

10. The culture of knowledge economy is a fundamental pillar in Hong Kong, which begins with individual competencies and ends with national achievements through a high level of education in both public and university sectors.	10. Traveler Mohammed Nasser Al-Aboudi says that Muslim Chinese invented foods that are no less strange than inventions in some industries. This is an indication of the determination of people belonging to a particular culture to promote their culture and engage in it as well as prove their continuous contribution to it.	10. Kesi is still practiced today by professional weavers called (masters). Their products are one of the most important Chinese heritage products that express precision, beauty and patience.	10. Studies, although few, prove that the festival is capable of serving as an important knowledge content that fuels many creative and scientific ideas as well as innovative and design-related directions. It can also be an important source of opinion regarding culture and heritage, as well as identifying the society's desires, future priorities, and aspirations.
11. The new Kowloon Cultural District project is considered to be one of the biggest and most important architectural projects in Hong Kong. Due to the importance of culture, the Hong Kong government approached it in a way that it becomes a mirror to its culture, which combines authenticity with modernity.	11. The belonging of Muslim Chinese to their country, and their ability to integrate their religious culture into Chinese culture while reserving the characteristics of each produced a cultural mix that extended over centuries, which is worthy of contemplation and study.	11. The researcher believes that the origin of Kesi and the secrets surrounding it should not only be viewed from the lens of history, archeology or genetics but they are also a fertile field for creative thinking and design.	11. Al Janadriyah complex in general and particularly the heritage village, are in dire need of development to reflect the fact that they promote linking authenticity to modernity.
12. The realm of ideas in Hong Kong witnesses a continuous growth in the responsibility of associations and centers of design, art, economics and entrepreneurship to revive the ancient heritage in the spirit of today, etc.....	12. History shows that the Islamic and Chinese civilizations had a great interest in the study of herbs, which is a vast field of research and innovation due to the vast information accessible thanks to the age of knowledge.	12. Today, Kesi is greatly related to the disciplines of art, design and innovation. Studying it through these aspects may help discover new ideas about the place and time of its origin, and the circumstances surrounding it in terms of Ideas and development.	12. We live in a new century full of knowledge and technical and technological revolutions; however, presenting the past under the current methodology of the festival will have the current and future generations think that the authentic values of their nation and its unique identity and products made by their ancestors and forefathers are entrenched in popular traditions and ancient heritage. This in turn will lead them to believe that tradition and heritage are static elements that do not develop nor generate new elements of creativity and innovation, which is certainly not the case.

13. The institutional system in Hong Kong is aware of the importance of design and innovation through encouraging and enabling the role of young entrepreneurship in design, innovation and creativity that aims in part to revive the Chinese culture and heritage.

14. Hong Kong government promotes its tourism, economic and scientific role by reserving its Chinese roots. It depends on the development of design, art and innovation and links them to its culture and knowledge economy.

13. Today, Kesi is one of the traditional Chinese crafts with a high level of manual skill. With Kesi, fabric surfaces are woven and decorated as per the preference of customers, or fine works of art or writings are weaved using natural silk through simple equipment and complicated steps.

14. Moreover, the researcher believes that Kesi is viewed as an art and a design rather than a valuable traditional weaving craft with high technique and skill. When the products of Kesi are being woven by women, one feels as though every product created by their hands carries the art of multiple generations. It is a design of a life full of past experiences, present interactions and future aspirations. Those who witness the making of Kesi will know that culture and heritage teach patience, responsibility, and accuracy. They generate happiness, originality and distinctive brands.

15. The most important characteristic of the Kesi craft and products as a brand is the value of its authenticity, which has two bases: a reference base, which means that its technique is related to respecting beliefs, values and culture; and an interactive base, which means that its product is related to creativity in terms of art, design and innovation.

13. The festival in fact still needs creative and progressive thought, as well as an innovative and behavioral direction that promotes the festival to be within the rhythm of the current era that is based on the economy of knowledge, innovation, invention and design.

14. To achieve the "qualitative shift" in the festival, we need two major changes: first, perceiving culture and heritage as sources of exploration and innovation, which cannot be achieved without the concept of apperception. Second, the need for a performance that can transform thought into competitive outcomes, which cannot be achieved without augmentation-based behavior

15. The Kingdom of Saudi Arabia does not lack the material and moral resources related to civilization, culture and heritage through which it can move towards new horizons of creativity, innovation and design. It also possesses great intellectual minds who are fully familiar with their culture and heritage and are able to absorb the progress of knowledge and to benefit from the cultural and heritage experiences of people

16. Kesi would not have continued throughout history and generations for being an expensive piece of cloth, but because it is a piece of values and culture, and an art full of meanings and feelings that represent the lives of people. The decorations and pictures in the Kesi fabric are not merely ornamental nor are they purely aesthetical; they are emotions and feelings that are transferred from dreamers to be woven by skilled individuals.

17. Preserving the life cycle of silk (sericulture), creating competencies that are able to innovate with silk, documenting silk and enabling the role of the society and those interested in it are the most important factors that made China the main producer of silk throughout the ages.

16. In order to promote the festival to reach new levels, it must be reinforced with minds that believe in the culture of design and innovation rather than the culture of reproducing the past and mimicking it



Culture Components



Culture Approaches



Culture Knowledge

Table 1, Interpretation of observational studies with culture components, approaches, and knowledge. Source: Author. Fawaz A. Bakhotmah.

Chapter Seven

Justification of People

- 7.1. Opinions of intellectuals: Looking for a Competitive Cultural Model!
- 7.2. Opinions of People: Encouraging Innovative Cultural Approaches!
- 7.3. Opinions of Organizers: Opening Minded for Improvement!

7.1. Opinions of intellectuals: Looking for a Competitive Cultural Model!

We will briefly touch here on the result of the interviews conducted with five of the Saudi scholars who are distinguished in their thinking and diverse experiences in the governmental and private sectors. Moreover, those intellectuals do have their own opinions, analyses and thoughts on culture and heritage as important data in the renaissance of societies. Full interviews and biographies can be found in Appendix 2 & 3.

The discussion with the five intellectuals focused on knowing their views regarding the four development issues of this thesis and the importance that culture-based innovation be within the frame of the KSA development policy-making. There is a consensus among the five intellectuals, that innovation in Saudi Arabia is still not activated as desired, and this is consistent with the researcher's conclusions based on the study questions that were reviewed at the beginning of the thesis. In their opinion, innovation requires a great effort and persistent work, so it must be taken with the utmost importance on the part of decision makers and must be activated effectively with quick steps, which would achieve a quantum leap in the development of Saudi Arabia.

Furthermore, everyone agrees that we should clarify the importance of creativity, innovation, and invention to society, give them definitions, define concepts related to them, and identify the differences amongst them. On one hand, this procedure allows controlling creative, innovative and design practices to be within mechanisms that are consistent with beliefs and values, which will give development an added value towards excellence and global competitiveness. On the other hand, it gives those interested a sound intellectual, cultural, and legal knowledge of the channels of creativity, innovation, invention, and design, as the random method of managing innovation and design may kill many of its intellectual perceptions in its early stages.

There is also a consensus among intellectuals that culture and heritage make an essential pillar in global development, progress, and competitiveness. Islam came to lock the doors of backwardness and open the doors of creativity, innovation, invention, and design on the foundations of religion and morality,

which led to the emergence of an Islamic civilization, where creative, innovative, and design practices were surrounded by sophisticated rules that helped it reach the global excellence and competition, and at the same time allowed those interested in these areas to understand Islamic philosophy with its peculiarities, and expelled misunderstandings about it. The Islamic religion spread from the Arab Peninsula not only as a religion but also as a culture and civilization. Islam generally encourages people to make achievements and advancements and pushes them always to optimism. Therefore, it is the duty of every Muslim to read the Holy Quran with a deep understanding in order to act according to its instructions and to comprehend it to discover new things in it. The Muslim also has to deeply analyze the Islamic civilization resulting from the guidance of the Prophet and Islamic law, which had a great influence in forming Arab originality.

One of the points that Islamic civilization is exclusively characterized by is its ability to creatively find permissible alternatives to the things that Islam prohibited, forbade, or Considered as Undesirable acts. For example, the prohibition of wine or eating pork created an Islamic alternative cuisine distinct in its food and beverages; Islam prohibited the drawing of living creatures, so Arab Muslims created the art of Arabic calligraphy and ornaments; Islam prohibited banking benefits, so Muslim scholars created financial speculation and made man a partner in great profit or loss, etc... Islam also forbade collecting money without due payment annual zakat from it to the poor and the needy, etc., hence came the love of charities of all kinds and the establishment of endowments that are considered one of the most important Islamic social innovations which enhanced the fields of economy, science, work, and construction in Islam in general. Therefore, the intellectuals agree that Saudi Arabia's adoption of a developmental model in building civilization through religion, culture, and heritage it possesses is the correct "track" for global competition, as the Arabian Peninsula possesses "treasures" of cultural diversity on the religious and civilizational levels throughout history.

Therefore, the intellectuals see that if Saudi Arabia has the ability to activate the strategic dimension of this civilizational track and make creativity and innovation among its primary goals first, and among its economic goals second,

it will find itself ahead of the countries with a large time difference and a distance that other countries cannot catch up with. However, in their opinion, this approach still needs appropriate mechanisms that help to build the capacities, invest ideas, and develop laws. Islam encourages people in general, whether Muslims or non-Muslims, to make achievements and progress, and always pushes them towards optimism, no matter how great the difficulties and hardships are. It can be said that all thinkers agree that (culture / civilization) is the most important gateway to support the development of Saudi Arabia, and this is what our ancestors did, and so could occupy the top of science and knowledge pyramid for hundreds of years. In addition, investing (culture / civilization) is a prerequisite of success for individuals, societies, and knowledge-based economy strategies.

The intellectuals point out that religion and culture are present in the consciousness of Saudi society, and all what is needed is a smart start, as the decision makers may not have qualitative and urgent ideas in this regard. yet, the government at the same time does not have the barriers that used to exist in the past! It may only lack its different ways of making a civilized future through: promoting the knowledge of generations about innovation, supporting competencies, establishing endowments in all fields of science, culture, industry, health, sports, entrepreneurship, etc., and not limiting endowments to charity, sheltering the needy, and the like. Moreover, the decision-makers in the Saudi government must motivate society and the private sector towards productive thinking which is based on investing all available resources and opportunities, including culture and heritage, in order to establish in the heart of society that Islamic civilization values and Arab originality excellence are our true competitive mission.

Intellectuals believe that Saudi Arabia now has cultural awareness at multiple levels, but most of this awareness still remains limited to holding festivals, celebrations and evenings, which should change to projects that sponsor creativity, innovation and design on one hand, and add diversity in the fields of education and economy on the other. There are great capabilities, creative minds, wonderful cultural diversity, and one religious bond amongst all Saudis. Therefore, the intellectuals describe the “Janadriyah Festival for Culture and

Heritage” as the most prominent annual event in Saudi Arabia over three decades, but until now, it has not taken its role to be a permanent component that interacts and overlaps with the daily life of society, as it still needs to translate the Arab Peninsula’s physical and moral historical, cultural, and heritage treasures into competitive initiatives. Therefore, it must be transformed into a productive global cultural project, in order to tell the world: “look, we were here before oil, we were a great civilization, we did know how to live and produce, and we were happy too”.

Furthermore, Al-Janadriyah is also eligible to be a distinguished headquarters for researchers, scholars and students teaching, and a center for knowledge and historical information related to the civilization, culture and heritage of the Arab Peninsula to enhance reflecting on it and raising questions about it, where did it come from? How did it interact with people through the ages? Are there creative and innovative ideas for developing and investing it? Therefore, it became highly important that the state supports and encourages the turning of some festivals and events into integrated projects based on research, science, and production so that it helps stimulating the civilization, cultural and heritage reservoir so that it becomes a creative thought that works within the creative development and sustainable economy based on potentials the non-oil and opportunities available. When activated as a scientific methodology, culture will have too many creative outputs capable of generating various innovations and inventions, as they are closely related to the details of our daily life and yet a source of beauty that stimulates action and progress. The most important thing in culture and its creativity is the pillar of originality; for example, cultural heritage was original and then became old in the eyes of many. Afterward, we find it coming back revived in one way or another to show its originality in a way that is commensurate with the time it exists in. Thus, we must acknowledge and admit that the cultural and heritage aspect of societies is extremely important in activating creativity through which we reach multiple levels of innovation, invention and design.

When talking about the obstacles that hinder investment in culture through innovative methodologies, we find that the main reason is that the knowledge-based economy in Saudi Arabia still needs robust initiatives in the fields of

innovation and design where it is managed by civil society and the private sector and is supported and encouraged transparently by the government under a system of Islamic values and Arab originality. Some intellectuals also note that currently, all research centers in Saudi Arabia are centered in the universities, and thus are isolated from the productive sector and civil society on one hand, and that the academic sector did not provide robust outputs in the field of thought and innovation that can help and motivate companies to adopt them, on the other. Intellectuals add that one of the hindrances of innovation is also the administrative method that deals with innovations non-holistically, and this may be attributed to the lack of experience in this field as we noted earlier, add to that the open market which has a major role in slowing down the wheel of innovations and inventions in our society as it opens the door for import, which makes consumption as the society's goal, and this makes us always in need for others.

Therefore, we need to radically change the consumer behavior and turn it into productive behavior, and this is not strange as it was strongly present within the culture of the Arab Peninsula and certified by its material and moral heritage. Another obstacle is the migration of local crafts and the failure to develop them appropriately in Saudi Arabia, which led to taking their ideas and developing them in other countries, then importing them as antiques and products, or bringing non-Saudi craftsmen to work in a professions that were part of the heritage and culture of the Arab Peninsula, such as: stained glass, plaster, spinning, weaving, blacksmithing, carpentry, etc. We must be aware to these matters and we have to develop them in a knowledgeable and non-traditional method of thinking, because their benefits are not only reflected on the economic level, but cultural, civilizational, and competitive levels as well. Furthermore, developing the cultural concept in the various fields generates other ideas compatible with the spirit of the age and the needs of society. All five intellectuals agree that the society which is aware of its culture and heritage respects its past and then adds new innovations that are compatible with the present, and that is through a continuity and creativity that preserve for the generations the historical sequence of their culture and heritage and the strength of its ideas and creativity.

7.2. Opinions of People: Encouraging Innovative Cultural Approaches!

The survey questioned the strength of the Saudi National Heritage and Culture Festival in five main areas related to the development process in the Kingdom of Saudi Arabia through what was previously discussed in the observation cases. The themes are: 1) the importance of preserving culture and heritage; 2) the ability of culture and heritage to find serious ideas for the diversification of the economy and employment; and 3) push towards the development of creativity through culture and heritage; 4) generate innovation through culture and heritage; All fields including culture and heritage. The first axis of preservation of culture and heritage in the front of the responses was 60.8%, which is expected but relatively low. The reason for the decline may be due to two possibilities: the first possibility, that some believe that the festival in its current content is not the best way to preserve the culture and heritage. The second possibility may be due to the multiplicity of options included in the questionnaire, which has created an assessment in line with new non-traditional intellectual fields that are consistent with the festival's objectives, which is probably the most likely possibility! These intellectual areas are not among the priorities of the festival participants - as we shall later see - but all cases are considered a point of view, which should be considered in future plans for national development in general and the festival in particular. The survey showed that there is a relationship between the idea of the festival and the possibility of diversification of the economy and the creation of new job opportunities by 51.5%. This relationship may be attributed to the movement of selling and buying traditional products that may only be available annually during the festival. As for the ability of the festival to develop creativity in its current status reached 38.1%, and this is due to the various offers of handicrafts, popular cuisine and artistic patterns, which may be seen for the first time by the visitor of the festival, thus reflecting as creative values. As for the festival's relationship with innovation, it came to 35.1%, which is an approach to creativity. It is highly likely that innovation here cannot be considered a real innovation. It is an extension of the values of the heritage, which the visitor sees creatively. This reasoning between creativity, innovation and design may be true if we consider the confusion that may occur in the definition of creativity, innovation and design. In any case, the results of the first part of the questionnaire confirm that there is a relationship between the festival and the five points mentioned above in varying proportions. Most of which were for the benefit

of the festival as a preservation of culture and local heritage, then as a variety of economy and job opportunities, then creativity, innovation and design. These results confirm the importance of discussing these axes with a more detailed methodology, especially those related to the festival's ability to diversify the economy, increase opportunities and generate creativity, innovation and design. These axes also proved that there is intellectual awareness centered on culture and heritage not only as a review and preservation, but as a renewable intellectual content capable of finding: 1) Knowledge creativity that is sustainable, 2) Creating an innovative and design-based thinking. See Appendix 6 and 7 for more details.

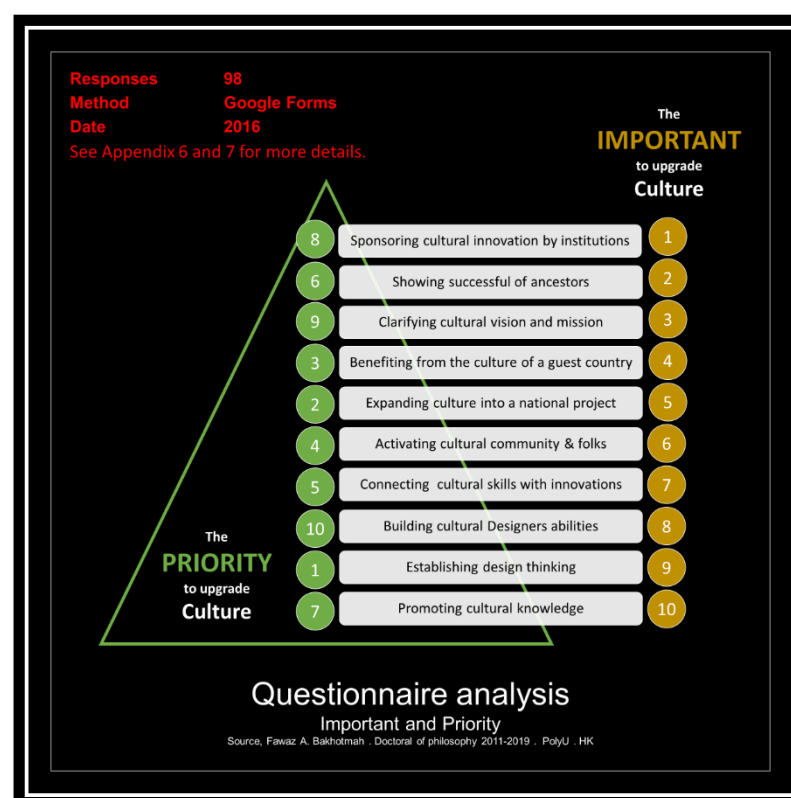


Figure 7.1 shows peoples' opinions in culture upgrading. In general, the three most important priorities that captured the respondents' views were: first, the festival is managed by the design thinking methodology. Second, the festival should be transformed into a national project based on creativity, innovation, invention and design in the field of culture and heritage. Third, to benefit from the countries that hosted the festival regarding the culture and heritage aspects and to build bridges of cultural and heritage cooperation between the two countries. concept: Fawaz A. Bakhotmah..

To analyze the components of cognitive creativity and inventive and design behavior, the researcher assumed ten axes for the future of the festival to explore the opinion, as part of the input of the scenario that the researcher seeks to highlight the importance of the future of Saudi development through its culture and

heritage as creativity, innovation and design. By analyzing the views on the axes showed that the results were very positive and exceeded the expectations, where the analysis was not based on ten points, a score less than six points, and ranged between these points in the following order: First, the ministries and government institutions participating in the festival must have their own vision to support culture and heritage creatively, innovatively and designedly and not only to highlight their traditional services and achievements through the festival. Second, there must be pioneering ideas that highlight the life, struggle and success of parents and grandparents in the past within the home, community, work, etc., to motivate future generations to think differently, find new skills and produce competitive products and services. Third, all participants in the festival from public and private sector and individuals have a goal and a message to activate our culture and heritage by adopting creative ideas or innovative skills or local, regional and international business to prove that culture and heritage can generate many initiatives and opportunities. Fourth, the guest of the festival is very important in conveying a new cultural and heritage experience to Saudi Arabia on the one hand, and in forming friendships and creative, and innovative friendships based on the interaction of civilizations, cultures and heritage between the two countries. Fifth, the festival has become a sustainable and productive national project for creativity, innovation and design as well as maintaining its current context as an annual festival to preserve heritage and culture. Sixth, the festival should provide pioneering ideas that increase the interaction between the community and the heritage knowledge of works of art, singing, poetry, dance and folk to promote creativity, innovation and design, in the spirit of the age and the boundaries of identity and originality. Seventh, the festival should move from showing and presenting cultural and heritage works to non-stereotyped activation of the abilities of the craftsmen, talented, interested, entrepreneurs and economists to create an entity that can find innovations and designs. Eighth, the importance of the designer to be the most basic in all areas related to the design of products and services provided by the essence of culture and heritage. Ninth, the importance of adopting design thinking as a requirement that helps to create economic diversification of the country, create jobs, and build quality jobs based on innovation and design. Tenth, the festival should take advantage of its great potential to sponsor ownership, large land areas, material wealth and the ability to bring intellectuals at the local, regional and global

levels by building a specialized knowledge base, exclusive in the culture and heritage of the Kingdom of Saudi Arabia from which there is the creative, innovative and designer.

In the previous part, we detailed the analysis of the components of cognitive creativity and the innovative and design behavior that the researcher assumed through ten axes, which were arranged based on their importance. But is this importance in the arrangement compatible with the same axes when dealing with them as priorities in the application? The following analysis shows that the priorities of applying the axes may differ from their importance, meaning that the importance of something may not only be achieved by working on the priorities ahead! The following analysis shows that the axes as priorities differed as they were important in terms of order. More importantly, we will review the status of the previous ten themes and how they are ranked as priorities. Figure 7.1 shows the study Questionnaire analysis based on 98 responses.

The ninth theme of design thinking came as a first priority to be activated in the future of the festival, followed by the fifth axis of the demand to transform the festival into a sustainable and productive national project for creativity, innovation and design. However, the benefit of the guest of the festival maintained its importance in the fourth rank by proving its priority in the third rank. In addition, seeking to activate the community towards participation in cultural and heritage arts to promote creativity, innovation and design rose from the sixth interest to be the fourth priority in the future of the festival. The seventh important point of activating the abilities of artisans, talented people, entrepreneurs, economists and the economy towards culture and heritage has risen to be the fifth priority. The analysis confirmed four exceptional observations, namely the fall of the axis of the government bodies and the ministries participating in the festival, etc., from the first rank as importance to the eighth rank as a priority. In addition, the importance of highlighting the life, struggle and success of parents and grandparents in the past, etc., dropped from second place to be a sixth priority, All participants in the festival have a goal and a message towards activating our culture, heritage etc., from third place as importance to ninth place as a priority. The design hub and designers also fell from eighth place as importance to 10th rank as a priority. This decline may be due to the difference between emotional evaluation and practical evaluation.

Emotional evaluation is devoid of thinking about the mechanism of application. The practical evaluation may include thinking about numerous things including the mechanism of implementation, which makes the steps to achieving priority status to ascend to another axis more important. Finally, the focus of activating the festival's has a great potential in the formation of cultural and heritage knowledge as a seventh priority, after it was in tenth place as importance.

The results of this questionnaire emphasize the importance of activating heritage and culture, and this activation, on the one hand must be linked to national development and the importance and priorities of the goals that achieve this development. The results confirm that the National Festival of Culture and Heritage can be transformed into a productive and sustainable national project that generates creative knowledge, innovative talents, professional designers and entrepreneurship, and qualitative investment, all based on culture and heritage. The results of the questionnaire underline the importance of activating culture and heritage, and on the other hand this activation must be linked to national development, and the importance and priorities of the goals that achieve this development as we previously discussed four questions on the matter.

The results of the questionnaire also show that transforming the festival into a sustainable, productive national project will be able to operate itself with creative thinking, creating economic diversification, job creation, generating a stimulating environment for creativity, innovation, invention and design, and competencies with an intellectual ability to analyze and synthesis and be able to address regional and global competitiveness

The questionnaire also confirms that the national festival and many similar projects in Saudi Arabia are capable of forming an innovative society, productive individuals and a brainstorming environment if developed by the methodology of this study or similar studies, While 72.2% thought that the idea of this study is distinct in this respect, 15.5% considered it very good, 9.3% considered it a good study, 1% considered it acceptable, and 2.1% did not find it important. The questionnaire also emphasizes that creativity, innovation and design are of great importance in achieving an innovative society and productive individuals and environment, which generated more than 90% of the ideas, but most of them are distinguished by

excellence. However, this requires the creation of multiple design disciplines and a sustainable design thought that stimulates generations to create, innovate and design through their culture and heritage. The survey also confirms that science and technology and the amazing acceleration in the progress of knowledge, specifically digital knowledge among countries are very important, but the distinction remains on the part of those with a history, civilization, heritage and culture, which can intelligently integrate them within their creations, innovations and designs. This is the opinion of the majority that is more than 90%. In general, the three most important priorities that captured the respondents' views were: first, the festival is managed by the design thinking methodology. Second, the festival should be transformed into a national project based on creativity, innovation, invention and design in the field of culture and heritage. Third, to benefit from the countries that hosted the festival with regard to the culture and heritage side and to build bridges of cultural and heritage cooperation between the two countries.

7.3. Opinions of Organizers: Opening Minded for Improvement!

The organizers of the festival are proud that the country's top leader annually inaugurates the festival. They also take pride in the idea that the festival is a "homeland for all", meaning that all the culture and heritage of the Kingdom of Saudi Arabia should be highlighted by the festival without any financial fees taken from participants or visitors. Organizers stated that no festival at the level of Arabian Gulf and Arab countries was similar to this one. This encouraged many countries to look forward to being chosen as guests of honor at its annual editions. The organizers also consider the festival itself to be a developmental project. It develops and expands with each edition in terms of organization, increasing the number of participants and bringing culture, heritage and character to the region. This encouraged steady growth of the site of the festival, starting from a popular market for handicrafts in 1985 until it reached a cultural and heritage village containing a large number of permanent buildings and multi-use areas extending about 1200 meters between the southern and northern gates of the village. Added to this are the vast parking spaces and future expansion areas. Organizers state that one of the key contributing factors to the success of the festival is the analysis and treatment of mistakes as well as the festival preparation process with all concerned parties, which often takes a few months before the commencement of

the festival. They also added that one of the key challenges that the festival faces, is the demand of multiple permanent sites within the village, as opposed to temporary sites under the policy space of the site. Finally, the participants said that the festival leadership is open and interactive with any vision of the festival based on stages of achieving a modern development concept for the country.

Chapter Eight

Study Discussion

8-1 Highlighting on thesis's questions

8-2 Interpretation between the thesis questions and the thesis knowledge

8.1. highlighting on thesis's questions

8.1.1. First question

Is the vulnerability of product diversity due to the lack of prioritization between the expenditure on projects (Realm of Things²¹¹) or generating ideas (Realm of Ideas²¹²) or attracting competencies (Realm of Persons²¹³)?

The researcher believes that the concept of economic diversification began from the pioneer's era²¹⁴. Their ideas were aimed at using knowledge in building

²¹¹ For further details see please (4.3.2.) Malik bin Nabi's trilogy of culture and (4.4.3.) Culture Interactive Criteria

²¹² See above

²¹³ See above

²¹⁴ A researcher's terminology for those talent leadership and ministers of Saudi Arabia before development plans. E.g. the first Minister of Petroleum in Saudi Arabia (Abdullah ibn Hamoud Tariki, 1919 -1997), where he said, "the potentials of industry in our country are available; the crude resources and the workforce are available but not trained, and their import increases production costs. We have to start teaching our children the industry" (Al-Saif, 2007, p. 122) The minister saying this does not want to collect the wealth of the country only, but he wants to build a human capable of collecting these with creativity and innovation through the most important wealth Allah has given them, namely, the "oil". In an article in 1959 entitled (We Must Have Public Petroleum Culture) he confirms this and says, " the petroleum culture we have is almost a culture confined to some young specialists, and that all of our young intellectuals lack to know a lot about petroleum issues: as material, industry, extraction, sciences and marketing... and also to know something, even a little, about the oil laws and regulations, and he further must know something about the agreements between the producers and owners of the land from where oil is extracted" (Al-Saif, 2007, p. 125) Therefore, we are here in front of a personality who wants to achieve, through the manpower, an outstanding identity for the nation based on human development. He was hoped that all positions shall be occupied by the people of the country starting from the director of the company to the smallest worker in it" (Al-Saif, 2007, p. 138) The utmost patriotism and responsibility of the minister appears when he said in one of his conversations, "as iron is a German industry, coal is an English industry, wood is a Canadian industry, coffee is a Brazilian industry, then oil must be an Arab industry, as the Arabs ... have the greatest reserves of oil in the world, it is estimated that 70% of the world reserves lie in the Arab lands, and oil will play an important role in the life of the Arabs, whether they accept it and like it or not, it is a double edged sword; if they benefited from it and knew how to use it, it raises their economic standing, their standard of living, their military position, and everything related to their lives, but if they did not do so, it turns to a weapon against them used by others to humiliate and enslave them" (Al-Saif, 2007, pp. 140-141) That is why the minister had crucial decisions, including those with respect to petrochemical industries when he said: "it is forbidden ultimately to burn any gas from the gases that comes out with the oil to the surface of the earth, this gas must either be used in industry or sent back to the bottom of the ground to be preserved for posterity of the coming generations" (Al-Saif, 2007, p. 181) Yet, with this enthusiasm towards consolidating the concept of the national identity through the manpower, we find that the minister had a point of view regarding giving the priority to bearing the responsibility of industry, its development and control, or to giving the priority to the expansion of agriculture, where he says: "We must use science in all of our plans. If it is proven scientifically that exploitation of this region (agricultural) widely is cheaper than importing these products, we have to take advantage of the possibilities as far as possible, but if the production costs are high, we have to import the products from brotherly neighboring countries" (Al-Saif, 2007, p. 142) From this agricultural point of view, appears the point of view of another national personality that has reservations on the point of view of the Minister of Petroleum at the time, where the Director General of the Ministry of Agriculture in those years before the development plans comments saying: "I am with professor Attariqi (Petroleum Minister) that our country is not agricultural ... even if we exploited all our agricultural capabilities ... but giving a sound opinion on this subject must be preceded by a thorough study of all the agricultural potentials in the country on the one hand, and the

human resources capable of creating an economy based on vertical and horizontal diversities, and multiple output generation (horizontal diversity). These products create diverse productions based on creativity, innovation and design (vertical diversity). This developmental thought with a profound philosophy - I believe - did not find continuity, and development. In addition, after the advent of development plans and the beginning of the era of the great oil boom and the global capitalist attack that we're able to limit moral development thought (choice of competencies and generation of ideas), and the launch towards material development thought. (Wealth and possession of things), which is in the school of spending, loans and recruitment, the country has from that era to the present day moved strongly towards horizontal expansion without thinking of vertical expansion, which led to a significant weakness in the selection of leaders that generate economic ideas and investment competition.

This situation, unfortunately, has had a negative impact on the creation of an industrial and productive non-oil system with professional skills that have the potential for global competition. This has caused considerable unemployment and the depletion of large sums of money, such as subsidies and loans. The researcher also believes that the Saudi development plans have focused, in good faith, on hiring managers who know how to do them administratively, not the inspiring leaders they know and develop creatively. For example, leaders focus on the completion of things by the continuous development of cases, ideas and systems, whereas managers are focused on the completion of things only in accordance with the system and political directives where they work! The leader tries to constantly search for rich questions, while managers focus on finding solutions to the question. The rich questions for the leader are a continuous process of development not only to find out what the direct causes

amounts of our needs of food products on the other hand ... all these studies are necessary to decide whether our country is able to follow the policy of self-sufficiency (agricultural)" (Al-Saif, 2007, p. 143) The researcher believes that both Ministers at that time have given the human manpower and knowledge priority in the renaissance of the Kingdom, through complementary economic strategies, not left to bring money only, but to diversify its sources through knowledge and innovation to create a diversified economy based on vertical diversification and also horizontal diversification. Abdul Aziz Al-Khedr says: "When comparing a cultured pre-boom (pre-development) plans with a cultured after these, we notice that the formation of the cultural elites in the fifties and sixties is better than the elites in the end of the seventies and eighties and beyond, and are stronger scientifically and more knowledgeable and more successful in contributing to development" (Al-Khedr, 2011, p. 501)

of problems or what solutions they can work towards. But they also work to explore new causes and underlying issues as well as knowledge of the culture and mentality that deals with such causes.

This is something that does not appeal to many managers. Therefore, the researcher believes that the future development of the Kingdom of Saudi Arabia does not require more executive managers. It needs leadership competencies that believe in the freedom of opinion and other opinions. It seeks to develop systems and interact with society and urge inclusive work that interacts with all public and private institutions. Adnan Iqbal, in his 2011 research on the importance of development orientation towards innovation and creativity, says that Saudi development policymakers are required to take a comprehensive developmental view of all their development policies and that they cannot be satisfied with specific factors. [3] This will only be transformed into the activation of leadership competencies and encouragement of inspirational ideas in all areas (People and Ideas) and not to spend large sums only on projects (Things). Time proved that without hardship leaders and ideas we will not be able to build up a Saudi's competitiveness development or in other words "Competitiveness Civilizational Model" for Saudi Arabia.

8.1.2. Second question

If Saudi competencies (Realm of Persons) are the ones who will steer the country's next development, and they are fully aware of the importance of creativity, innovation, and design as a requirement for knowledge economy. Accordingly, what should the priority should be: to find solutions for existing issues (Realm of Things)? or to activate the creativity, innovation, and design (Realm of Ideas)?

Through the analysis of the nine development plans, the researcher finds that development in Saudi Arabia has been and continues to be in the process of developing solutions through political or economic orientations based on oil and price fluctuations, which requires transparency to be scientific and popular participation! Whatever the situation, Saudi development as a whole is absent from creative thinking. Aldukheil, Abdulaziz M. says concerning the need for Saudi development to think creatively:

Saudi Arabia's strategic dilemma is its complete economic dependence on its oil and gas reserves, which will be depleted in a few decades. No other assets in Saudi Arabia today, natural or manmade, can substitute for the value of oil and gas in reducing the country's dependence on petroleum. The Saudi private sector, though vibrant and more efficient than the government, suffers from the same disease as the government; while the government is directly dependent on oil revenue to finance more than 90 percent of its expenditures, the private sector is heavily dependent on government expenditures. It is a vicious cycle of oil dependence that engulfs the government, the economy, and the people. Creativity is required. (Aldukheil, 2013, pp. 195-196)

There is no doubt that the weakness of creativity in Saudi development is one of the reasons for the weakness of knowledge and education, both of which undoubtedly lead to the shallow development outcomes of innovation, invention and design. The importance of this system can be seen from the conclusion reached by researchers Mohammad Al-Sudairi and Saad Bakry who explained:

While the current main generator of wealth in Saudi Arabia is oil, the future main generator of wealth in the country should be knowledge. Since knowledge is people, Saudi Arabia spending on education exceeds that of all other distinguished countries considered. However, the knowledge delivery state in the country is still generally below expectations relative to the other countries considered, and relative to spending on education. What is perhaps needed is building the knowledge culture in the country, in order to promote people's drive toward knowledge generation and innovation and toward making efficient utilization of the newer knowledge. (BAKRY, 2014)

In any case, the future development of Saudi Arabia cannot continue on the principle of developing solutions without a strong base that will activate real creativity, innovation, invention and design, and revive all traditional crafts and handicrafts with renewed thought. The competitiveness of countries today is no longer based on the concept of a developing or advanced state or a large or small country. It is built on the power of countries to acquire knowledge, generate ideas and stimulate creativity, innovation and design. This is evident through the evaluation elements of the Global Competitiveness Report of World Economic Forum in the competitive assessment of countries:

Today the differentiation of countries based on whether they are “innovation rich” or “innovation poor.” which means that the traditional distinction between countries being “developed” or “developing” will become less relevant. The Global Report rates the countries’ Competitiveness based on 12 pillars: Institutions, Infrastructure, Macroeconomic environment, Health and primary education, Higher education and training, Goods market efficiency, Labor market efficiency, Financial market development, Technological readiness, Market size, Business sophistication and Innovation. (KLAUS SCHWAB, 2013, p. xiii)

All of the above 12 elements in one or another involve creativity, innovation and design. They have become an important strategic triangle in the progress or delay of countries in all fields, especially when the economy is surrounded by a world of unlimited knowledge and culture, and another world of technology and renewable ideas. Both worlds drive towards the design and development of products and processes of value and competitive quality. Quality and competitiveness can only be achieved through an environment conducive to creative activity based on substantial investment in research and development, innovation and design by others. The public and private sectors and high-quality scientific research institutions along with strong intellectual property protection must support both. [4, p. 37]

The answer to the second question can be summed up in the fact that Saudi Arabia urgently needs to develop mechanisms to activate creativity,

innovation, invention and design with serious and genuine employability of the talented people set out in all its development plans and strategies before devising solutions to existing problems. On the other hand, the new young leadership and competencies that will guide the future development of Saudi Arabia should understand the importance and value of design as a thinking and as a discipline, help creative thinking, develop innovative behavior and develop solutions based on participation, transparency and democracy. Hence design has been, and remains, a key area in the progress of nations.

Researcher's analysis for development plans proves that design is the "missing link" in all Saudi development plans. Consequently, the Saudi development process has lost a crucial specialization capable of: (1) Transforming creativity, innovation and invention into reality products, services and theories with the ability to link them to generate competitive models, (2) Exploring talents, developing their ideas and realizing their thoughts; (3) Interacting with government and private institutions to increase their output in line with the knowledge and technological progress; (4) Raising the sense and taste of society and open many ideas and ways of cooperation and communication. In short, the absence of a clear mechanism for a design policy tasted by the community and within its education linking creativity, innovation, invention and talent, there will be no effective solutions to development issues, and there will be no ability to find competitive products and services, which will keep many aspirations, visions and ideas on paper.

8.1.3. Third question

Assuming that the priority of future development will be driven by creativity and knowledge investment (Realm of Ideas), while, what should the future Saudi Arabia development model be based on; innovation and design, or, oil revenues and transformational industries?

From the answer to the first question, we concluded that Saudi development is in dire need of creative leaders who are able to build competitive institutions based on innovation and design, and are able to harness knowledge, society

and international relations to develop innovative development visions. As for the answer to the second question, we conclude that the visions of creative development where they cannot be achieved with the continuation of the interventions of political power or submission to the dictations and fluctuations of the global economy, making the visions of development unclear, non-transparent and unsustainable. Therefore, in order to realize the creative visions of development, it requires real activation of innovation and determination and greater attention to talented and courageous and renewed thinkers. Without activation of the knowledge society and economy, Saudi Arabia will experience major economic failures that are exacerbated by the sharp decline in oil prices, the failures of attracting qualitative investments and failures in the formation of the system. Advanced industrial or non-conventional oil needs the skills of knowledge, innovation and design with high efficiency and quality. Can this level of motivational knowledge only be accessed on the fundamentals of public and higher education and what is their reality?

It is clear from the above that the issue of the diversification of the economy has become complicated, that it has been written as a basic development objective in all development plans, but the results differ from what was written; the dependence on oil income, the increase in cheap labor, manufacturing and production. It is not very different for the strategy of the economy and the knowledge society, where it is facing failures for lack of understanding by different sectors of the state, or not applying them properly in line with their objectives in the short, medium and long term. This failure may be seen in the fall of Saudi Arabia in some of the global indicators related to creativity, innovation and design over the past three years, which is very much related to the seriousness of the economy and the knowledge society. The two previous issues (the diversity of the economy and the knowledge economy) are highly interdependent. A qualitative leap in Saudi development cannot be achieved without a perfect harmony between the diversity of the economy and the culture of innovation. A culture of creativity cannot flourish without a society capable of innovation, invention and determination. The community can sense the values of innovation, invention and design without activating knowledge and instilling love of science, research, exploration, challenge and competition. This system

cannot function effectively without a strong and effective culture that urges its values to progress and prosper.

8.1.4. Fourth question

Is the culture and heritage of Saudi Arabia (the culture and heritage of the Arabian Peninsula) an inspiring, powerful, effective and rich culture capable of taking the lead in promoting Saudi development towards a new era of progress and prosperity based on knowledge and talent, innovation and design, production and industrialization?

The Saudi writer Abdel Aziz Al-Khder, in his huge book on "Saudi Arabia - Biography of the State and Society" 2011 indicated that "through a multi-stage the literary regard dominated over the comprehensive concept of culture (in Saudi Arabia) and dumping in literary matters at the expense of the thinking. That is why until recently the cultured is looked at by the public only as someone who reads literature books and poetry and memorizes poems and proverbs" (Al-Khedr, 2011, p. 474) So the author thinks that "despite of what he been expended during the development plans on the culture institutions as of research centers, libraries, universities and literary clubs, it remained ineffective locally and regionally; its outputs were just publications authored in a traditional way dealing with contemporary culture, devoid of the definition of civil ideas and nationalities, and the concept of the nation according to the contemporary political awareness, Islamic philosophies and philosophical schools. What proves the weakness of the influence of Saudi culture" The author explains that "increasing the religious subject in education is not a defect. Whatever it appeared radical in the eyes of some, but the fact is that religion is a part that cannot be bypassed in societies likes ours" he added that "the problem of religious education being an overdose was in need of another cultural dose that eases the radical visions, promotes awareness, and absorbs modern concepts" (Al-Khedr, 2011, p. 475) The author gives an example that "The output of the Saudi religious education reached thousands of Sheikhs and Sharia'a scholars but did not generate scientific elites similar to the capabilities and production of other scholars in the Arab countries" (Al-Khedr, 2011, p. 476)

The researcher agrees with the writer that the vision of culture is limited and the religion is an essential matter in a society as the society of Saudi Arabia and cannot be margined or ignored or even think of underestimating it as a lifestyle that affects the entity of the community as families and members all on one side, and as a government, and institutions on the other. However, the researcher does not agree with the writer on that religion subjects in Saudi Arabia are overdosed in education, it is more sense to say that religion subjects were not included in education in a modern renewed form and integrated into the methodologies and other subjects. Islamic religion was not ever in isolation from the world or from communities under the rule of Islam, but it was a single entity with it that increases its strength of determination in the reconstruction of the earth and promotes renewing its intellectual granting and innovation, and drives it towards keeping life beautiful and productive for others, even by planting a seed in the ground at the death. The Islamic methodology in its golden ages, that continued over hundreds of years, was elevated because of the ignorance of many nations and others competing; this methodology was able to merge religion with the life in total compatibility unprecedented through the ages until the present time.

Therefore, it is not the overdose of religion that was the cause of delay in the progress of civilization, but the weakness of creativity and innovation in the integration with religion of daily life that was the reason for the delay in progress and competitiveness of the Islamic and Arab countries. I also do not agree with the writer when he pointed out that religious education in Saudi Arabia "did not generate scientific elites of similar capabilities and production of other scientists in the Arab countries," but rather for fairness, the Saudi education even if it did not keep pace with the educational elite thinking in the developed countries, yet it has given birth to many elites. However, for obvious reasons such political, the level of freedom and the global campaign against Islam that are trying to prevent these elites to speak or express their opinions frankly.

Finally, I agree with the writer that Saudi Arabia "needs another cultural dose that eases the militant visions, promotes awareness and absorbs the modern concepts," but how? To answer this question, I think we should appropriate the vision of the Saudi scholar Mohammed Bakhotmah when using the term

"cultural boom" (Bakhotmah, 2010) within his vision of the issue of culture in Saudi Arabia in his book "Our Cultural Boom". This term being new, but it is justified! Where he says, "I have called this work as 'the cultural boom' for a simple reason which is for its similarity with what happened in the "oil boom" on the seventies and eighties of the last century – it could have been an economic renaissance rather than a boom; a boom in its meaning is a sudden and fast going off the ordinary, while renaissance means a gradual transition from one stage to another to reach a specific goal." (Bakhotmah, 2010) Then Bakhotmah explains that because such booming the country became blessed with a lot of money, causing large and rapid life and community changes which soon subsided to surprise us with an economic deficit and social disintegration, accompanied by the world entering an era unprecedented as of the open media, information, technology, internet and the American domination. Bakhotmah says, in this atmosphere, the people investment based on the real stat instead to investment on cognitive benefiting for their country and its community. While others are trying to use the cultural openness today in achieving fame gains, changing the cultural features of the foundations of the community. However, Bakhotmah hope that, the country should benefit from its previous experiences and the experiences of other nations in the establishment of its own cultural model. In this respect Bakhotmah says "It is required to deal with the cultural issue as a humanitarian need of the national community not as a media maneuver to show up that we have our own culture. By another meaning, we need to direct our own cultural arena to grow in the direction of the nation cultural renaissance, rather than a random cultural boom." (Bakhotmah, 2010)

Based on above, Saudi Arabia needs an innovative development model based on its culture and heritage. It reinforces the spirit of enthusiasm and initiative in activating its society towards knowledge and talent, the ability to innovate and design, to stimulate production, to manufacture and to generate ideas. Could someone say that Saudi Arabia is interested in all these facts?! We say: Yes. But this interest in culture, heritage and values has not yet risen to build a "civilized model" as we have already explained.

In this thesis, we seek to give such an example of a "civilized model" that interacts with the potentials, competencies, cultural and heritage resources available on the one hand, and with the ability to innovate, innovate and design on the other? The researcher does not want the great cultural movement in the Kingdom of Saudi Arabia today, do not count as a (Saudi cultural boom) as we mentioned earlier, similarity (Saudi oil boom), which was spent most of its money in the construction of mega projects, some of which stopped and was not completed or completed and was not used distance. Saudi Arabia frankly did not invest most of its funds in the exploitation of its resources and human potential in building or encouraging creative cadres capable of design, innovation and production!

Lastly, the development decision maker have to know that the national culture and heritage of Saudi Arabia belongs to the culture and heritage of the Arabian Peninsula extending its history and civilization to thousands of years, which makes them: the spirit and pride in the hearts of those who belong to it. The culture and heritage of this region is further enhanced by the fact that its material and social goals are derived from the principles, ethics and values of the Islamic religion and the authentic Arab civilization which approved scientifically by Salwa Khatib (2011) when studied that, whether there is a Saudi national personality? The researcher concluded that there is a Saudi national character that distinguishes the Saudi people from other societies. "One of the most important features available in the Saudi personality is the commitment to religion and the preservation of customs and traditions, followed by the values of work such as organization, design, responsibility, will, self-expression, control and ambition, etc. The order is followed by renewal, innovation and a certain tendency to imitation and simulation." This indicates that Saudi culture has a different effect, and its role is reflected in religion, customs and traditions, and its influence is greatly reduced in the promotion of production and innovative work, which is completely contrary to the values and ethics of the Islamic religion and the achievements of the Arab-Islamic civilization. Therefore, we can say that the culture of Saudi Arabia still preserves its source of strength from religion and values but was affected in terms of its giving of

innovation and production because development and society were directed after the oil boom to luxury and consumption!

8.2. Interpretation between the thesis questions and the thesis knowledge

Through the critical analysis of the above questions, the researcher concluded that there is a common factor that brings them together when answering them, namely, the importance of creativity and innovation. This case has made the researcher search in the development plans where it is striking that the term innovation was extensively used in all development plans, specifically used with development and regeneration, the economy and industry, trade and investment, etc. then came the importance of creativity. It was used less in some development plans, specifically in education, culture and intellectual matters. Then the term talent emerged in recent development plans as a support for the knowledge-based economy. However, it is noted that these three terms are included in the development plans as an added value, rather than as real outputs that reflect real economic diversification, competitive knowledge investment or renewable productive and industrial capacity.

To be more optimistic; there may be such great intellectual outputs that have been generated by innovation, creativity, and the discovery of talent. But with this optimism, the sense of it remains at the grassroots level, because it is not translated into products, industries, services or advanced theories. However, so much holistic and bold unconventional thought is still needed. From this standpoint the researcher saw that Saudi Arabia needs an innovative development model based on its culture and heritage. It reinforces the spirit of enthusiasm and initiative in activating its society towards knowledge and talent, the ability to innovate and design, to stimulate production, to manufacture and to generate ideas. Could anyone say that Saudi Arabia is interested in all these facts?! The answer is: Yes. But this interest in culture, heritage and values has not yet risen to build a "civilized model" as we have already explained. In this thesis, we seek to give such an example of a "civilized model" that interacts with the potentials, competencies, cultural and heritage resources that are available on the one hand, and with the ability to innovate, and design on the other.

The researcher does not want the great cultural movement in the Kingdom of Saudi Arabia today, to not count as a (Saudi cultural boom) as we mentioned earlier, similarity (Saudi oil boom), which was spent most of its money in the construction of megaprojects, some of which stopped and were not completed nor were they used for the whole duration. Frankly, Saudi Arabia did not invest most of its funds in the exploitation of its resources and human potential in building or encouraging creative cases capable of design, innovation and production!

8.2.1. The perception of culture

Since this doctoral thesis aspires to activate innovation based on culture, and because studies in this field are limited, the researcher must begin by clarifying the relationship between culture and innovation? Culture is a set of multiple beliefs, values and intellectual orientations that differ from one society to another and from one culture to another. Many experiments and studies prove that culture promotes the growth of ideas within multiple domains, and that these ideas stimulate the exploration of innovations inherent in the content of cultures. To achieve this, the researcher reviewed this position in three aspects:

First. To clarify culture as beliefs, values and intellectual approaches.

There is no point in studying a culture-based innovation if a student does not believe in the culture he wants to generate creativity, innovation and design in. Culture is a life system that influences the attitudes of individuals who believe in or directly or indirectly belong to it. The researcher undoubtedly believes that cultures are generally linked to religions, beliefs or values, no matter how much others try to prove otherwise. The Arab-Islamic culture and its heritage are entirely the product of the Islamic religion. The more it reaches it through a constructive transfer and mental thinking, the more impressive the outputs. The Golden Age, as mentioned above, is the greatest proof of this. The more Arab Islamic culture depends only on the transfer of religion or only on the use of reason and the exclusion of religion, solved by underdevelopment and degradation and aggression by others, which can be divided by the situation of Muslims and Arabs today. Islam paves the way to the Gardens of Bliss and also strongly drives the reconstruction of the earth in all its fields at all times and in any place.

The researcher points out from the scientific secretariat that innovation based on culture in a society such as Saudi Arabia cannot be discussed in isolation from the Islamic religion and culture. Islam is not an emotional matter for the researcher's affiliation, but rather is one of the basic knowledge sources in accomplishing the thesis and maximizing the usefulness of its ideas and applications.

Second. Culture fosters the growth of ideas within multiple domains.

The researcher has reviewed two areas that prove that culture has been credited with developing and sustaining ideas and innovations around them. The first is culture and the world of finance and business; the second is culture and design and its link to creativity and innovation. As for the relation of culture to business, we approved that, because of "Ethnocentrism". Theories and training programs have built models of typical relations between culture and business, so that many companies and institutions consider that this has a great relationship to their success or failure - Management, marketing, products - depends on the degree of harmony between the national and institutional cultures. And culture has become one of the main economic components that must be nurtured and developed through new ideas and concepts and innovations as they become an effective field in global competitiveness. As for the relationship between culture and design, design is a culture of creative thinking, a culture of democratic dialogue and an innovative work culture, influenced by concepts stemming from the basic culture of society. It is the characteristics of design, development and change for the better, which the cultures of societies also look for. The design can also be shared with all other disciplines, giving them added value. This value can have different cultural dimensions. Therefore, there are development indicators that emphasize the importance of decision-makers in culture and design, which strengthen the state economy, and the most prominent evidence of this is the so-called "design economy" in Britain and achieved remarkable national production.

Third. The thought about culture stimulates

The exploration of the innovations inherent in its content, assisting this is that the concept of culture today is interacting in a reciprocal way provided by the various cognitive and social media, the amount of information is amazing, as well as the rapid industrial and electronic progress. These and other unprecedented facts in the history of humankind have made the concept of culture stand out clearly not only at the level of research, studies, theories and definitions as it was in the past, but also at the level of innovation, invention and design, which progressed culture towards total interaction with all aspects of life on both its moral and physical sides. To creative contributions, pushing towards a competitive and diverse material output with values and an identity that links the heritage of the past with the present and the future. In this context, we aim to provide real examples illustrating what we mean by innovation based on culture? Let us understand the mechanism of exploring innovation within the content of cultures. Thus, the researcher reviewed twenty-seven realistic projects that, after analyzing them, led to multiple trends that stimulate the understanding of innovation and culture-based design and drive to explore more of them by observing and hoping for culture and heritage in everyday life with a thought outside the box.

8.2.2. The apperception of culture

The most important interest in proceeding in his thesis after the establishment of the relationship between culture and innovation through the three aspects above is focusing on the concept of "objects and ideas" within the culture. This is because they are two subjects promoting the interaction between the culture as a living organism with man in a way that is suitable with time and space. Ibn Khaldun said about the objects and ideas within the cultures of the peoples more than six hundred years ago, "but they are proficient in the luxury of the goods... of kitchens, clothing, buildings, mattresses, and other objects of the house and its conditions". On the other hand, " objects and ideas" are the core of design and innovation, so it is important to focus on their knowledge. Without one, the other cannot exist; both seek to produce either material or moral

outputs. Therefore, this thesis is among the knowledge that requires its outputs to be a flexible application process that deals with the development of the behavior and skills of individuals towards innovation and design, not a static philosophical theory related to the philosophy and definition of cultures.

In order to achieve practical outputs, the thesis presented three methodologies related to the activation of the components of culture as an incentive for innovation: an approach that gives the "object" the greatest interest, in the sense that people and ideas hover around objects. Another approach gives "thinking" a greater interest, meaning that people and objects hover around ideas. A third approach gives "people" more attention, in the sense that objects and ideas hover around people. All three methodologies were dealt with by the Arab Muslim philosopher Malik bin Nabi when he said: "The realm of objects" is the first thing that draws the child's attention since birth. His mother's breast for him is the real thing, and then he begins to recognize his mother and his surroundings (in the realm of people). Then, the 'child' moves to the stage of abstraction, analysis and synthesis of what is around him in (the realm of ideas).

It is not possible to innovatively deal with culture through these three methodologies, which is better in the development of man and his multiple life systems. But, with a thinker capable of understanding the apperception between the components of culture (system, pattern, elements and traits), not only perception that is reviewed above, with the trends of augmentation to reach innovations and designs in a variety of ways and ideas and not just dictates of technology.

Metaphorically, we can say that most of what we see today about culture is presented as a philosophy of literary universality from multiple points of view, not as an abstract canvas. Or ideas about a product can be developed or as a system can be used or as a science can be used in research discovery or as economic transactions can be developed as alternatives to existing economic systems or even as a service method that best respects and brings people closer to one another. In order to benefit from the culture through these channels, we must consider the following three pillars:

First. We need a thinker when dealing with culture-based innovation

Innovation and design need thinker²¹⁵ that can deal with multiple disciplines. The thinker is the mindset that can understand new and unconventional theses because it is characterized by a love of knowledge, a search for new knowledge and follows intellectual context characterized by independency, freedom, clarity and a sense of responsibility. The thinker is broad-minded because he does not look at things from his original specialization but tries to find visions that include multiple disciplines. He does not believe in narrow angles. He has the ability to cross from one part to the other, and from narrow vision to broadening vision. The thinker is a lover of creativity, innovation and design. He is always looking for newness, and avoids stereotyping, tradition and dependence, which cultures and traditions provide without limits when they are observed and hoped.

The researcher examined many definitions of culture and its importance in Arabic and English, and reached a personal conclusion that the definitions of culture, which are examined from deep philosophical studies, cannot be relied upon in an absolute way in stimulating innovation based on culture or the thinker's above mentioned industry. Why? Because most of culture definitions are often a literary narrative description aimed at personal insights in the development of theories and definitions or evaluation and critique of civilization and heritage. On the other hand, we find that the outputs do not provide great assistance in the development of innovation and design from the data of culture and heritage, making the society in general and innovators, inventors and designers, in particular, believe that culture and heritage have a close relationship with the past and do not contribute to their knowledge of the industrial and advanced, nor add any value! In addition to the two sides mentioned above, the researcher noted that many of the philosophical cultural writings speak about culture in general without placing importance on the religious or social differences, because of which there

²¹⁵ Regarding the importance of thinker, it has been discussed in detail on the topic of the knowledge gap of this thesis

were qualitative transfers in the life of humanity. This is the difference between the qualitative shift of the Islamic golden age, Scientists, and the qualitative transition of the Renaissance because of undermining the connection of Church's culture with science and scientists. Cultures have many values and diverse data associated with things, ideas and people, all of which must be dealt with through interaction and intelligence. Through analyzing the reality, we find that the Western and the Oriental societies developed intellectually, industrially and informally have incredible achievements in the manufacture of things and generate ideas and respect the efficiency of people, these achievements can be seen in the daily life as products, services and cognitive science.

Second. We need to abstract when dealing with culture-based innovation

We need a new approach that deals with the vast stock of cultures with the mentality of the thinker, not only with the mentality of the philosopher, and the difference between them is very considerable. The designer thinker is always looking to turn ideas into reality, even if they are imaginary, and proof of this is the terrible rapid development created by the world of innovation and design during its relatively short historical life. The philosophical thinker does not always look to turn ideas into reality or even try to devise ways to test them to determine the credibility of his philosophical ideas or failures. In other words, we need to introduce a system of philosophical cultural visions from a design point of view that can be transformed on the ground into products, services, economic systems and works. The best example of this is the success of philosophical cultural thought by architects and designers through the ages in directing works that attest to the strength and influence of cultures. The architect and designer have the ability to read the culture of peoples and communities and develop them with their design ideas to be successful projects. Therefore, the researcher believes that the first steps towards the activation of culture to an innovative philosophy is abstraction. Abstraction is not only organized and simplified within areas that consider the capabilities and human skills, not all human

philosophers and not all innovations came from the minds of his science or literature, expected by the mind despite its simplicity and abstraction. Therefore, the researcher considers that the comprehensive and abstract definition of culture and its four entries mentioned by Paul Schafer in his book about culture the beacon of the future may be a preliminary prelude to an unconventional cultural thought that is consistent with the thought of Ibn Khaldun and Malik bin Nabi and stimulates creativity, innovation and design. For example, the entries of culture - for the researcher - are an important key in activating culture-based innovation for three main reasons:

- A. innovation and design are not just for doing products, but also systems, services and business models, in parallel, culture is not only a product of heritage or philosophy, but also a system of religion and values, and services of integrity, identity, style of thought, work and production.
- B. we know that innovation and design are part of the intellectual trends adapted with all time and place. At the theoretical and production levels, in parallel, culture and heritage have an endless stock of experiences and theoretical and productive ideas but have not been implemented except on the theoretical and philosophical side and very simply on the Intellectual and productive side.
- C. creative and innovative thinking can conceptualize and gradually reach the features of the future, but sometimes make qualitative transfers in all areas of life. The civilizations, nations' culture and heritage make qualitative progress if they are scientifically, creatively and productively invested, delayed and underdeveloped if used emotionally in museums and festivals.

Third. We need to build models when dealing with culture-based innovation

In the first part, we have already discussed the CBI model, but the model has not been explained in a detailed and scientific way, namely how we

can collect cultural or heritage information that is the basis in generating ideas and innovations consistent with the specificities of communities. Therefore, one of the most important knowledge that this thesis has reached and must be taken into consideration when discussing culture-based innovation is the formation of information through twelve pillars divided into three groups:

The first group contains six knowledge Bases: 1) knowledge of the religion or values on which the components of the culture originated 2) knowledge of the history that illustrates the evolution of culture 3) knowledge of the crafts promoted by Culture 4) knowledge of the science generated by culture 5) knowledge of Urbanism influenced by culture 6) and the knowledge of the civilization that was created by the culture. The second group contains three cognitive bases to understand and analysis the six previously existing cultural knowledge: 7) Understanding the general concept of cultural knowledge that is discussed through formulating abstract definition; 8) which of the four cultural approaches to use to activate the abstraction issue; 9) building a productive cultural model to support the discussed cultural definitions and approaches. The third group contains three pillars that promote the transformation of cultural theorization into cultural production through achieving innovative models based on the following: 10) Production through the methodology gives the "object" the greatest attention or; 11) the production through the methodology gives "thinking" the greatest attention or; 12) The production through a methodology gives "people" more attention.

This mechanism of the twelve pillars was concluded from chapter four detailing the thoughts of Ibn Khaldun, Malik bin Nabi and Paul Schafer. They were implemented in chapter six through four observation studies that demonstrated their abilities to extract and understand the cultural components knowledge and to explore priorities for action. This mechanism is also very thorough in exploring or discussing any cultural component (system, pattern, elements and traits), which are also knowledge platforms, each platform has its intellectual input and has

creative outputs that differ from the other platform. This philosophy is the product of two factors:

- A. the importance of transforming the concept of culture from a theoretical philosophy to a productive philosophy where we have massive cultures needs that are necessary for the mentality of the creative, innovative and design thinking not only the mindset of the philosopher and theorist.
- B. the creativity, innovation and design are not just for producing a product but also for systems, services and business models. Therefore, it was important to adopt this research on the case studies of realistic projects explored and the development of their values and evaluation of their outputs or even objectively critical if and when necessary.

These case studies were selected based on the intellectual assumptions developed by the researcher to suit each cultural input, for example, the success of activating the institutional approach to innovation and design depends on the art of leadership, the applied approach depends on the art of community discovery, the theoretical approach depends on the art of cultural information and knowledge activation through education and research which encourage meditation, reflection and interpretation. As a matter of fact, conceptual approach to culture is appropriate to explore the future of culture and heritage from its multiple angles and built on philosophical and artistic visions that on the one hand depend on the mobility of communities, and the reality of positive or negative global trends on the other.

8.2.3. The augmentation of culture

How do we innovate from culture? This is a rather difficult question, which needs multiple hypothesis, studies, researches and applications. In other words, we somehow need to augment our cultural intellectual. The question is: Why?

Evidently, we do not exaggerate if we say that most of the products of knowledge culture, as we mentioned earlier, are philosophical knowledge that

discusses one or another culture in terms of personal opinions (Ethnocentrism, Cultural relativism, etc.) or historical theories or through description and comparison. In other words, the available cultural knowledge may not help to activate or operationalize the concept of culture-based innovation, and this is not limited to one culture without another, or one language without another. On the other hand, this kind of innovation may face another cognitive dilemma: cultural data, information and knowledge, when available, lack coherence in the composition, interdependence, and originality of history.

For example, the civilizations and cultures of the East in general and the Middle East and North Africa in particular are a collective product from the family and the end of the regime of succession. Alternatively, they were an empire passing through the clan and tribe, all affected by religions and governance and values and preaching and customs and still in some ways, this effect is still at play to this day as a legacy or preserved as systems ruled by a controlling family monarchy or a partisan or a violent dictatorship. The cultures of the West are in general cultures that are not of the same historical roots when compared to the culture of the East. They do not contain the complexities imposed by successive religions and traditions throughout history. They are a culture of standing on the philosophy of individualism and consist of trends and ideas, supporting the aim of the individual doing what he or she desires at any given time and place. The freedom of the individual increased when the clash and the terrible schism between the Church and the Western community took place.

From this point of view, the researcher assumed the two previous rules of perception and apperception to create information on culture-based innovation. The perception is based on the sense's exploration of culture by questioning it from its broad rather than narrow content; a good question is more important than the answering. We have explained this in detail in the first chapter of this thesis. The apperception is based on the interactive assimilation of the big data and the experimental understanding of the explicit and tacit knowledge of religion values, history experiences, current possibilities and the future life scenarios. This was explained in detail in the fourth chapter of this thesis.

To clarify; most of the information circulating among people via the Internet and social media programs is a kind of social information that is traded between them from the viewpoint of their cultures, relations and opinions. This information is an important practical entry for culture-based innovation. Approximately, 95% of these sources of information have not been treated, coordinated and regulated within such means of knowledge supporting a kind of innovation. Therefore, it is a new and stimulating source of culture-based innovation.

Both rules encourage the development of existing knowledge of cultures or the creation of new knowledge to promote culture-based innovation. Therefore, the researcher conducted four field studies based on four cultural hypotheses, each hypothesis looking to explore the creative, innovation, and design in the culture through four approaches that could be a proposal for decision-makers in the Kingdom of Saudi Arabia linking development and culture. We have discussed these hypotheses in detail in the sixth chapter of this thesis. The results were fruitful, and are as follows:

First. The cultural institutional approach hypothesis

The quality of development and its several outputs depends on the institutional approaches to reinforce culture, heritage, values and the understanding of the related physical and moral issues (the cultural institutional approach). In order to confirm this hypothesis, Hong Kong was chosen as a case study. The observations proved that; the state must always be enthusiastic about choosing decision-makers with a cognitive talent for development skills based on understanding ideas by apperception rather than only by perception. It must also seek out those who can expand ideas (augmenting ideas) and translate them into a basis of competitive economic and investment diversity.

Second. The cultural practical approach hypothesis

The physical and moral sense of the communities' daily culture and heritage depends on the society's ability to activate what it possesses of the realm of objects, the realm of persons, and the realm of ideas (the cultural practical approach). To examine this hypothesis, the famous

Muslim Quarter of the Chinese city Xi'an was chosen as a second case study. This quarter does not stop at serving food, desserts, and beverages according to Muslim law (Halal). It is also a quarter that is studied heavily by university students, researchers, and interested people from within and outside China. This quarter is one of the main tourist attractions in China, and one of two most important attractions of Xi'an, which are the Terracotta Army and Old Muslim District. The observation proved that the quarter is a (synthesis) of community cultural ideas towards using their religion and heritage abilities in producing alternative and innovative economies.

Third. The cultural theoretical approach hypothesis

The qualitative promotion of culture, heritage, and the related knowledge, professions, and crafts depend on the interest of the higher education in them (The cultural theoretical approach). To examine this hypothesis, the researcher participated in the revival initiative of luxurious ancient Chinese silk at the Design School of the Hong Kong Polytechnic University. This initiative is a creative exhibition with the name "One Inch of Kesi Silk, One Ounce of Gold". The observation proved the ability of organizers to promote the artisans to negotiate the ways of silk revival within the community of designers, innovators, and entrepreneurs, which can lead to finding renewable domains that reinforce the role of this historical industry to be included within the creative ideas and the designs of innovative commercial productions.

Fourth. The cultural conceptual approach hypothesis

The culture and heritage can participate in treating development challenges (economic diversification, knowledge economy, design policy, etc.) through creative cultural concepts (The cultural conceptual approach). To prove this hypothesis, the Saudi national cultural and heritage festival was chosen as a fourth case study in which the concept of culture-based innovation through scenario can be applied. Scenario is the art of perceiving the future rather than predicting or guessing it. It is a methodology tool in making decisions and putting a future strategy that fits the time and place. It is also a planning tool that helps in building

a long-term view within a vague world through understanding today's choices. It also facilitates answering the study's questions through utilizing cognitive levels as inputs; the philosophical level as stimuli; and the practical level as products, services, or theories outputs. However, culture-based innovation could be an output (material and immaterial) based on culture as Regulating, Articulating, Transforming, Transcending, Collaging and Imagining; as we will see in detail this thought in the next chapter.

Chapter Nine

Implementation of CBI²¹⁶

9.1. Scenarios of expanding national festival into national project

9.1.1. Culture-Based Festivals (Realistic Scenario)

9.1.2. Culture-Based Economy (Pessimistic Scenario)

9.1.3. Culture Based-Innovation (Optimistic Scenario)

9.2. Scenarios Interpretations with

9.2.1. general inquires

9.2.2. perception, apperception and augmentation

9.2.3. Observational studies

9.2.4. justification of people

9.2.5. study questions

9.3. Janadriyah Innovation Model (JIM)

9.3.1. Janadriyah Innovation Team (JIT)

9.3.2. Janadriyah Hardship Management (JHM)

9.3.3. Janadriyah Design Thinking (JDT)

9.3.4. Janadriyah Stakeholders Group (JSG)

9.3.5. 9.3.5. Janadriyah Partners Group (JPG)

9.4. Janadriyah Innovation and Design Waqf (JID-Waqf)

9.4.1. Waqf, a Muslim social innovation strategy

9.4.2. Waqf, a Muslim investment strategy

9.4.3. Waqf, a Muslim development strategy

²¹⁶ Culture Based-Innovation (CBI)

9.1. Scenarios of expanding national festival into national project

In the case study of the national festival for heritage and culture, we found that Saudi has huge civilizational, cultural and historical recourses. It also owns intellectual capabilities in creating innovative systems in all areas. However, there seems to be a problem in the activation and investment of these recourses and the ideas that go around them. This is due to a structural weakness in creating a system of competencies that are able to develop and change freely; to create a developmental paradigm shift based on creating intellectual innovation, in addition to creating an innovation behavior rather than bragging about the past and trying to revive or invest it traditionally.

We found that there are people who call for the importance of formulating a new ideology for the festival. (Khalifa, n.d.) (National Festival of Heritage and Culture ‘ 2017) Some of them ask for transferring the festival into an economic, touristic and investment project. (Ali El Shady, 2017) (Abdulrahman Al-Sheikh, 2017) Others demand paying attention to the cognitive and informative content of the festival and making it available throughout the year with handicrafts training. (Abdullah Al-Mezher, 2018) (National Festival of Heritage and Culture, 2017) We have indicated that the latest suggestions concerning the festival operating throughout the year in order to participate in promoting tourism and economy (Mzmz newspaper, 2018) is an important suggestion since it comes as a result of formal agreement between two legal governmental institutions which are the Saudi Commission for Tourism and National Heritage (the proposing party), and the Saudi Arabian National Guard (the festival organizer)²¹⁷.

However, there is not enough information about this orientation, except what has been discussed by the local journals, that the two institutions will nominate a marketing and executing firm for some services related to the festival, while the tourism board must assist the Saudi Arabian National Guard to prepare the baselines of business marketing and organizing workshops for the events’ organizers regarding the festival, and establishing criteria and requirements for the

²¹⁷ In the time of submission of this thesis, the festival organization was transferred from the Ministry of National Guard to a new Saudi Ministry of Culture. However, this transfer of the festival organization to a specialized ministry emphasizes the importance of the researcher’s expectations when choosing the topic of this thesis. Hopes it will be an added value for the decision makers of the Ministry of Culture.

award for best participating region in the festival too. (Makkah Newspaper, 2018) Based on the lack of information regarding the festival's future and any means of improving it, moreover in order to avoid developing the festival using the conventional developmental solutions that fail to take into account the importance of the four national cases that the thesis is based on, we will review three scenarios about the festival's future and the factors needed for developing it regarding what was suggested in the festival's case study.

The scenarios are: 1) celebration scenario, which aims at harnessing originality to make it “national things” that prove the state’s concern of its authenticity through highlighting its history, civilization, identity, and reviving its diverse heritage in accordance with the political establishment requirements in promoting a sense of national belonging (the current situation). 2) Economic scenario which aims at harnessing authenticity to make use of it as “economic data “which is based on the material and moral culture and heritage objectives that attract the feelings and emotions of the contemporary society in a way that achieves profitable economic income through trade, investment and tourism (the prevalent situation in journalism). 3) Cultural scenario which aims at harnessing authenticity to make use of it, understand it and mediate it as “intellectual mechanisms” that support the cognitive innovation, the creative behavior and the design thinking. This will urge on finding a developmental paradigm shift that combines the authenticity data and the contemporary requirements (the suggested situation in the thesis).

9.1.1. Scenario 1: Culture-Based Festivals (Realistic Scenario)

This scenario aims to show the contemporary state’s concern of its originality through highlighting its history, culture, identity and reviving its diverse heritage in line with the requirements of the political establishment in promoting a sense of national belonging, medially rather than productively. This orientation is not only for conserving culture and heritage and inspiring pride of them through festivals, events, and annual ceremonies that are costly, thus directing the economic, investment, traditional thought toward them. This orientation as we indicated in the thesis is widespread in Saudi Arabia, and it is considered one type of the promotional development of national values and a way of showing loyalty to the political leadership.

There is no doubt that this orientation is considered a stable development that produces some passion of exploration and investment of heritage-based products to make it a cognitive and touristic attraction, and a factor of material and economic gain. However, it is an economic, cognitive and productive traditional development. In other words, festival development through facilities and programs in addition to attracting visitors is not considered a development which is based on “celebration originality”, but it is a sustainable development which is based on “originality development” in order to be included in the data of the knowledge age and the data of the scientific research and innovation, creation, and determination.

Originality as a celebration is a way of belonging with emotional sensations and national identity that results from the stereotypical administrative orientations and the traditional organizational thoughts. However, originality as a development is a way of belonging through working and revolving production. This makes it necessary to have contemporary creative orientations that are based on a quantum leap in administration and organization that do the following: 1) interacting with knowledge age’s orientations in the development of science, economy, and society. 2) promoting innovation thoughts and creative competencies. 3) supporting the enthusiasm of talented, artisans and designers. 4) discovering creativity and innovation out of resources and possibilities’ components, are the huge cultural and heritage ones. 5) the guests of the festival must be individuals and institutions who will help in shaping the development of Saudi Arabia not only for political and media purposes.

Therefore, we can say that the current model of the national festival of culture and heritage is (a stable development model, yet a traditional one). It is a stable one as it has continued to convene for the last three decades and more so in a repeated pattern, additionally it is independently supported, managed and organized by the national guard ministry²¹⁸. It is a traditional model as it depends on attracting people to learn about culture and heritage and to buy heritage-based products that are produced in-house or replicated, and those imported from abroad. This way, the festival became rather boring and

²¹⁸ The festival organization has been transferred from the Ministry of National Guard to the Saudi Ministry of Culture in 2019.

monotonous routine, however it is also included in the cultural and heritage-based luxuries! This may make the development of renewable cultural production through innovation, creation and designing so behind and thus needs to be upgraded to cognitive, pioneering and investment levels, qualitative and competitive, through innovation sense and creative behavior which the Saudi society wholly embraces incompetencies.

Decision-makers in this model consider culture and heritage an important means to conserving the culture and the history of the country, and an important factor in bringing the contemporary identity. Although it is a good thing, the attempt of combining data of originality related to the festivals with the contemporary facilities and services represented by the participation of the institutions and governmental sectors is still weak, and the link between them remains unclear. Hence it needs several ideas and studies that explain what innovation and designing can come up with as an added value to culture and heritage through the areas of these institutions.

The biggest mistake that the cultural and heritage decision-makers could make in such an orientation is assuming that the contemporary outcomes that have to do with culture and heritage are the encouragement of replicating the old cultural heritage, thinking that this is the best of modernity. However, what actually happens is (heritage copying) not (heritage developing) through creative and innovative models carrying the identity and originality of the past.

That is because of the unfamiliarity with philosophy and the necessary experience that may turn a great deal of conventional orientations into modern ones without affecting the identity and originality. Also, unfamiliarity, with the competencies quality that can be attracted, to activate culture and heritage as an innovative thought, in addition, to the absence of cognitive adequacy in creating the institutional nature that promotes innovation within the conventional systems and structures of institutions. This is in addition to the obvious deficiency in the manner of society activation by looking to the future with innovative and creative thought that is supported by its culture and heritage. On the one hand, one often finds in this situation that there are missing links between the society and the development orientations which cause a

dysfunction in building cooperation between the decision-makers and the stakeholders of culture and heritage. While on the other hand, there are missing links between adapting education and technology to benefit from culture and heritage to create new services, products or, modern theories with identity.

We can say that dealing with culture and heritage within celebrations and festivals ideology, and not with cognitive creativity, innovative behavior and design ideology, with the presence of talents, capabilities and competencies, the Saudi development will lose qualitative heritage opportunities based on culture and heritage. However, to produce and develop the cultural or civilizational opportunities, decision-makers must understand the following:

First, activating culture and heritage to promote the cognitive investment market in terms of creation, design and qualitative entrepreneurship. Robert Atkinson and Stephen Ezell say:

“Innovation is in some ways quite simple: organizing societal resources (research, finances, knowledge, skills, and entrepreneurial effort) to generate new products, processes, and business models... it is about challenging the status quo, identifying unmet market opportunities, and swiftly and effectively bringing new solutions to the marketplace.” (Ezell, 2012, pp. 300,303)

Second, changing or developing the current Administrative model of the festival to keep pace with the first section activation. This cannot happen without bringing or preparing the specialized competencies in the area of knowledge and economy society. Ghazi Al Gosaibi who is one of the veteran Saudi ministers says “the attempt to apply new ideas through men adopting old ideas is a waste of time and effort. New blood must be inserted in the old body. Only then, transition to organization, planning and execution is possible. Gosaibi thinks that this phase will take no less than five years to develop. (Al-Gosaibi, 1999, p. 229)

9.1.2. Scenario 2: Culture-Based Economy (Pessimistic Scenario)

The motives of this scenario are harnessing originality, to make use of it as an “economic resource” based on material and moral cultural and heritage things

that attract the feelings and emotions of the contemporary society in order to have it and enjoy it. Thereby, it will be a sustainable source for profitable financial income through marketing it or marketing its own festivals across commercial, investment or touristic channels. The researcher is unable to determine whether this orientation is finally approved by decision-makers. Indeed, it is a scenario that has been suggested based on the press information circulation. The researcher thinks that this scenario is very important to developmental decision-makers, as it can both fail and succeed. Undoubtedly, failure will be catastrophic and cannot be equated to the first scenario. The worst that can be said about the first scenario is that it is a "traditional development" not a "catastrophic development". This may cause risky effects on the cultural and heritage identity of the Arabian Peninsula in the long run! Thomas Sowell says

"Nothing is easier than to have good intentions but, without an understanding of how an economy works, good intentions can lead to disastrous consequences for a whole nation." (Sowell, 2011)

Thus, there must be careful dealing with culture and heritage from an economic perspective, as they are unlike oil! Oil and other natural resources are natural raw materials that man must extract and make use of. However, culture and heritage are intellectual components created by humans throughout history. Thus, experience must be extracted from them, developed and used. This scenario explains the worst orientation, if culture and heritage have been dealt with using a sense that contrasts the economic one which is based on knowledge, and which is according to the ninth Saudi development plan definition:

"an economy that is capable of knowledge production, dissemination and use; where knowledge is a key factor in growth, wealth creation and employment, and where human capital is the driver of creativity, innovation and generation of new ideas"

The researcher thinks that one of the strategic mistakes in the Saudi economic development is the consequence of the “oil boom” that depended and still depends on crude oil selling and not making the best use of it through innovation and designing. In other words, while the industrialized countries buy oil at a low price; they benefit from more than half the oil barrel (54%) in producing and manufacturing about 6000 products, depending on knowledge and industry intelligence. The rest of the barrel which is less than half is used to process as fuel. Hence, we find that the Saudi contribution in the innovative knowledge domains, creative behavior and designing thought that is related to utilizing the largest part of the petrol barrel is too weak. Therefore, it is important not to repeat the “oil boom” mistake by making another mistake that Mohammed Bakhotmah called “a cultural boom” which serves the traditional economic diversity concept, through which “a civilized model” that supports and activates the knowledge economy and society cannot be built. So, duplicating the same development plans mistakes will make this scenario highly pessimistic while dealing with culture and heritage as an economic resource; which will put them in danger, make them gradually lose their values and transfer them into a commercial object, not a human value that produces so much innovation, creation, and designing.

The most important priorities in dealing with culture and heritage as an economic resource is (constructing the human) who is able to deal with them in an innovative and creative way, and not as a good and business. This thought is not new, as it was found in Saudi Arabia before the development plans, namely before 1970. Precisely in the middle of the last century when the first oil Saudi minister (Abdallah Al Tareeqi) explained “the capabilities of introducing industry in Saudi Arabia are available; the raw materials as well as the labor forces are there but are not trained. Moreover, importing them will increase production costs. We have to start teaching our children industry” (Al-Saif, 2007, p. 122) the minister did not consider “money wealth” as the reason of a strong economy in the country. Indeed, he believed that “knowledge wealth” is the reason of building a strong human who is able to find strong, competitive, and sustainable economy for the country. This principle was not taken seriously in most of the development plans until the sixth development

plan came. In which the importance of scientific research development and innovation in public and private sectors appeared at last to increase the effectiveness of education, industry and services.

The aim of this is generating non-oil revenues which are still below the desired aspirations. The concept of industries activation, which depend on using comparative advantages of the national economy and transferring them into competitive ones, was added in the eighth development plan. Aleqtisadiah journal explains that the best possible use of relative area's advantages has yet to achieve the expected goals as hoped. Although it seems to be achieved in an area more than the other ones, in general its verification in the theoretically planned manner remains unclear. On the one hand this can be concluded from the slight contribution of the non-oil sector in the gross national income , and from of the amount of national employment, to which the Saudi records offer only very little good ratio " . (Alaiqtisadia Newspaper, 2011) So, any economic transaction even if it is through the comparative advantages of culture and heritage of the Saudi regions must be primarily based on knowledge and scientific research, not on economy and money to avoid destroying our intellectual fortune that was accumulated over thousands of years. From here, the importance of familiarity with labor and manpower available in Saudi comes to light; which would either be an added value in the economic achievement that is based on knowledge or a destruction to it. Mamdouh Alkhatib explains in an old paper that most of the labor used in industrial projects in Saudi Arabia is cheap, imported and with a fully flexible supply.

Workers from many regions (from Asian and Arab countries) rush to work for relatively low salaries. This leads to unique conditions for combining the cheap productive elements for the investor, and with a high flexible offer for the national economy. "Alkhatib, in successive scientific papers, adds more about the data problem concerning employment in Saudi Arabia. This data is very much inaccurate, which will affect accurately defining the size and quality of the economic diversity in Saudi Arabia. All scientific papers conclude that employment in its current status has a negative impact on the economic growth. This has made the ninth developmental plan emphasize the importance of "developing the productive and creative capacities of citizens, providing them

with rewarding work, expanding their participation in various economic activities and reducing unemployment rates". Therefore, decision-makers should take this point into consideration, and should ponder whether the cheap workers would ever get to a stage where they would trade in our culture and heritage or whether they are working because they rely on it for material gains rather than building national identity through quality and development. Thus, we will face a dilemma concerning consumer protection, which may promote fake cultural and heritage-based products or low-quality products that do not suit the thinking, nor consider the fatigue of parents and grandparents.

By this, Saudization and unemployment will top the scene. If we revert to the Saudi developmental plans, we find that Saudization was first clearly started mentioned through the fifth developmental plan. However, unemployment was not mentioned, except through the eighth developmental plan. That is not because it was not previously there, but because of the argument about it and the keenness of not showing it; Until it became a reality that can no longer be hidden. Consequently, we find that most of the solutions related to Saudization were a reaction to the rising level of unemployment. As a result, offering simple jobs with little income to the unemployed Saudi did not solve her/his problems in terms of financial stability, or career affiliation. Indeed, the interested individuals and social networking sites think that Saudization is taking the place of inexpensive migrant workers who are also not highly educated. As we said earlier, they enter the country's marketplace as needed, however they also do not positively affect the development of Saudi Arabia.

Indeed, all they care about is earning money and transferring it to their homelands. Therefore, it is imperative to take Gazi Al Qusaibi's advice, the former minister of labor said, "it is impossible for any country to succeed in putting an end to its unemployment while its doors are open for hundreds of migrant workers annually" (Al-Qusaibi, n.d., p. 2) He also thinks that "the success of Saudization is deeply related, radically and inextricably, to the training success on one hand; and to the labor market acquisition of the needed trained Saudi youth on the other hand" (Al-Qusaibi, n.d., p. 3) He also adds that supporting Saudization and ending unemployment, do not only depend on decreasing labor recruitment, and training the Saudi youth to take its place. But

they are also directly or indirectly related to the long-term developmental policies which make the Saudi citizen through general and higher education able to learn economic methodologies, that make him/her interested in willingly increasing his/her own skills, to produce new productive or service domains that provide the labor market with various jobs, in addition to commercial and industrial diversity. This is with respect to the citizen.

Concerning the migrant workers, there must be mechanisms based on categorizing them within ranges and percentages that determine their outcomes and explain the importance of their presence in accordance with the development process toward knowledge and innovation. This may need ambitious and courageous policies that may reach settling the migrant workers and naturalizing them if needed. So, the qualitative economy needs competencies, renewable thought in addition to providing a trained national employment that gradually cancels the intrusion of cheap foreign labor. Here, the use of governmental financial support that was offered in many fields comes into play. Mamdouh Alkhatib emphasizes that “the economic development is related to the structure and distribution of government support. This means that the government support impacting development is not only related to the size of government support and its level, but it is also influenced by the distribution of this support according to the sectors, activities, beneficiaries, and goals” (Alkhatib, 2008). So, Alkhatib concludes that the government support policy that was followed by the government of Saudi Arabia as a catalyst for economic growth in the non-oil sector had no important impact on the economic development of this sector. Misusing and wasting this free support, disturbing the perfect competition conditions, distorting prices structures, weakening the competitiveness of the economy, and resources misallocating had a negative impact, therefore, we do not want to make the same mistake. We want to give that support to those who have pioneering ideas and innovations that make the culture and heritage of Saudi Arabia competitive not only consumptive. This can be done by supporting competencies and promoting the areas of trained national employment in the fields of culture and heritage.

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through the fifth developmental plan. However, unemployment was not mentioned, except through the eighth developmental plan. That is not because it was not previously there, but because of the argument about it and the keenness of not showing it; Until it became a reality that cannot be hidden. So that, we find that most of the solutions related to Saudization were a reaction to the rising level of unemployment. As a result, offering simple jobs with little income to the unemployed Saudi didn't solve her/his problems in terms of financial stability, or career affiliation. Indeed, the interested individuals and social networking sites think that Saudization is taking the place of inexpensive migrant workers who are not highly educated. As stated earlier, they enter the country's marketplace as needed, and they also do not positively affect the development of Saudi Arabia.

The researcher thinks that the concept of cognitive economy started in Saudi Arabia through the ideas of the first oil minister, namely before issuing the first developmental plan in 1970. The minister's ideas were about using knowledge and training in building human resources that are capable of finding a strong economy based on oil in both vertical and horizontal Diversifications. The vertical diversity was about making the best use of the single resource for generating several outcomes. However, vertical diversity is about producing different productions based on creative knowledge that is specialized only in petroleum science. It is said that the minister ordered the companies not to burn the gas coming from oil and encouraged them to find ideas to make use of it or return it underground. This philosophical development thought - according to the researcher- did not continue due to both the massive oil boom, and the domination of the western global capitalism on oil countries. This made them interested in oil extraction and selling only. After selling it, they buy it again through thousands of products as we have previously stated. This situation made all of the Arab oil countries without exception consumptive countries rather than productive ones, although, they own the most important natural industrial resource that mankind has ever known.

This development must be understood, considered, and viewed as a learning curve in order to avoid repeating its mistakes in the future development. Although the fault related to the natural resource economy can be fixed due to

its massive reserve, the fault related to humanitarian and cultural resources including culture and heritage could be disastrous. It cannot be compensated if it has been forged or manipulated with, nor can it be produced as a cheap product, which can be bought and sold cheaply.

Mohammed Bakhotmah says that our future depends on our religion, civilization, culture, and heritage; and that the cultural stability and its national and social development produce the economic abundance, not otherwise. He says that Saudi Arabia must neither restrict itself and its thoughts in “collecting money” methodologies, nor seek to compete globally in order to reach an advanced position based on money. However, it must have its own different means in “making money” through giving trust to the generations, supporting the competencies and establishing endowment in all areas like scientific, cultural, industrial, and entrepreneurship. And should not only be limited to religious matter. The decision-makers in the Saudi government must support the private sector to open competitive areas based on these principles and facilitate it to them. Bakhotmah considers oil within the new culture that Allah has endowed us. Thus, our aim must not be money, indeed, it must be harnessed to innovation and creation too. Hence Bakhotmah muses in his book “advisers gentlemen... Country first” how do we want to see ourselves after fifty years? How do we want to hand our current inheritance to our children? What will we tell our children and grandchildren about our skills that they must make use of to continue the way and the process? What is our message to the rest of countries? Through this whole thesis, he thinks that the aim of Saudi Arabia is building a civilization model based on the human being, not money. (Bakhotmah, 2010)

9.1.3. Scenario 3: Culture Based-Innovation (Optimistic Scenario)

The motives of this scenario are finding a cultural model based on considering culture and heritage and understanding them as “intellectual mechanisms” that support innovation, creation and designing. Which will push for finding a development paradigm shift that combines the data of originality and the requirements of modernity with the utilization of this ceremonial orientation and controlling the economic orientation of culture and heritage that we previously reviewed. The researcher wanted to develop a perception for this orientation

through enhancing the Saudi national festival for culture and heritage, to make it a sustainable development project based on generating innovation, creation and designing through the components of history, culture and heritage of the Arabian Peninsula.

This orientation will promote building a cultural development model for the Kingdom of Saudi Arabia which will feed the future generation thinking with innovation, their behavior with creation and their aspirations by discovering both the sources of their culture and the material and moral diversity. This cultural development model will produce competencies capable of taking political, economic and social responsibility. The responsibility is proud of Islamic values and Arabic originality and proves its competitive position within the global cultural organization.

This scenario is completely different from the previous two, as it does not consider culture and heritage as a ceremonial orientation within the idea of culture-based festival, or as an economic and tourist orientation within the idea of culture-based economy. As a matter of fact, it is an orientation that supports pushing the Saudi society as a whole to participate in finding a sustainable developmental paradigm shift that combines the past, the present and the future through activating the principle of culture-based innovation; thus, this development will be within the daily life method. The ceremonial orientation or the economic one is not more than a simple rational way of thinking when compared with the vastness and diversity of innovative thinking in all areas. This is what China followed in its modern development, in which it admits that its culture and heritage were the most important factors for its modern development success as previously explained. So, this orientation deals with culture and heritage as cognitive and intellectual strategies that the development of Saudi Arabia can make use of in the development of dealing with the four important developmental issues that this thesis is based on, and that has been discussed in detail in part two and in the Appendices. On the other hand, this scenario agrees with what Arthur Schopenhauer says:

The task is not so much to see what no one has yet seen, but to think what nobody yet has thought about that which everybody sees.

Everyone knows about culture and heritage, but to reach the philosophy that was indicated by Schopenhauer in the field of culture and heritage, it is important to rethink and consider our culture and heritage deeply through our observation and through our unconventional questions about them; so that we can continuously discover, develop and produce new things from them! This will prompt us to consider the national festival for culture and heritage as a competitiveness framework through culture-based innovation. This orientation needs “to create something new out of something that already exists”. That happens through “to be structured to be creative”. So, innovation in this scenario depends on the unconventional way that the researcher looked at to see culture and heritage to make them a cognitive and intellectual strategy for a qualitative development for Saudi Arabia as previously mentioned.

Therefore, this scenario supposes that the decision-makers must deal with this festival as a national development project based on cognitive innovation, creative behavior and designing thinking through culture and heritage. This obligates them to know the strategy of economy and knowledge society, in addition to the strategy of science and technology, both of which were issued by the government of Saudi Arabia. Moreover, both are the foundations of the competitive future of the kingdom.

The two Strategies and what has recently been added to them including the Kingdom’s 2030 vision and the 2020 transition program all aim to make Saudi Arabia a cognitive society based on science and technology within a blooming cognitive economy full of recourses and possibilities by 2030. That is led by productive human capabilities and private sector, offering a high standard of living and a decent quality of life, which will occupy a prominent position as a pioneering nation, regionally and internationally, concerning the economy diversity with keeping its Islamic values, culture and heritage.

To transform Saudi Arabia into a cognitive economy, it must work hard to promote the innovative capabilities of the society. The most important areas

that will aid in this regard are: Education, science, technology, innovation, information and communications technology, industry that highly uses knowledge and Urban development. To achieve that, we must continue scaling up and improving new policies and strategies that were previously mentioned, in addition to developing new policies and carrying out major structural reforms on many of the current policies, orientations and initiations.

The knowledge strategy of Saudi Arabia evaluates the organization of innovation in Saudi Arabia as an unsatisfactory situation because of 1) the shortage of research facilities in the universities and general quarters compared with developed countries. 2) the gap between the production of knowledge and its investment mechanisms. 3) the absence of clear policies for development in administration, production and industry that are based on innovation. 4) the weakness of coordination and integration in the government initiatives and the private sector which produce a defect. The society of knowledge encourages the cooperation between both sides. This requires changes in the ideology of work performance, the administrative structures that are based on it in addition to developing the workers' behavior and their orientations in line with educating youth about innovation, creation and respecting work culture that is based on production.

It is clear that all future orientations for the development of Saudi Arabia should go towards building a society, economy, projects and initiatives based on knowledge, not celebrations or traditional economy. Thus, building the future of Saudi Arabia through education, training, scientific research, innovation and inspiring Arab-Islamic culture will create the new Kingdom's identity and the most important competitive axes in the globalization process, and the Kingdom's 2030 vision set by the new government of Saudi Arabia at the beginning of 2015 must not be neglected.

It should be noted that there is a national strategy for the youth that has not yet been activated, which is as important as the strategies of knowledge, innovation and vision. This strategy has the utmost importance in instilling the concept of Arab Islamic identity in future generations that will face waves of positive and negative globalization. It presents systematic innovation that encourages the

nation's current and future generations to endure the hardships of knowledge, industry and production to raise the standard of living, improve quality of life, challenge the pursuit of sustainable development and global cooperation and promote their ability to participate in all competitions and global fields including the economic, sports and social fields.

All of this needs a qualitative shift in the activation of culture and heritage. Therefore, without activating the society of economy and knowledge, and supporting youth to discover and develop the values of their originality and linking it with the current requirements and future outlooks, the results would be massive economic failures. The sharp decline in oil prices, the failures of attracting qualitative investments and the failures in creating industrial, technological and professional organization will worsen the situation. This cannot be reached without knowledge and innovation. Shin, Lee and Kim found through a scientific research about innovation which is based on knowledge in Saudi Arabia in 2011 "technological development was not based on scientific research in Saudi Arabia; rather, the technological development relies on prior technology". They said, "For better linkage between knowledge production and technological development" policymakers and researchers need to consider how to produce industry relevant knowledge and how to link knowledge production to industry and manpower training". They included that "The Saudi government may also find it useful to transform the current funding system into a more efficient one and to invest in R&D, especially at the graduate level for training for future manpower needs".

The researchers Al-Sudairi and Bakry proved in another scientific research about knowledge issues that Saudi Arabia must promote its cognitive ability; They find that "the knowledge delivery state in (Saudi Arabia) is still generally below expectations relative to the other countries considered, and relative to spending on education". This will negatively influence Saudi Arabia's global evaluation level in creation because, "The global innovation index (GII) dimensions, with their parts and parameters, are related to knowledge. However, some of these are directly associated with the knowledge activities of knowledge creation, preservation, diffusion and utilization". As for proposals, they say, "While the current main generator of wealth in Saudi Arabia is oil, the

future main generator of wealth in the country should be knowledge" So, Saudi Arabia must promote its cognitive ability in several cognitive levels, to name but a few "knowledge creation, knowledge impact, and knowledge diffusion issues"

All this data forces development decision-makers in Saudi Arabia to reexamine many policies, projects and initiatives through its strength, weaknesses and challenges that can be reformulated by knowledge economy; including the national festival for culture and heritage. By studying the festival, we can see that there is:

1) strengths of the festival, namely the festival idea is creative, derived from the sense of belonging to Islam and Arab civilization, and making heritage and culture a role model to the generations. It is the most important festival about culture and heritage at the local, regional levels. It is also a stable and developing festival, spanning the course of more than three decades which is opened annually by the most important rank in the nation, the king. It is managed by an administration that has an experience in culture and heritage and organizing the participants and visitors in addition to maintaining peace and security. It is a festival that owns vast portions of land strategically located in Riyadh, the capital of Saudi Arabia. This location contains all services and is able to house the biggest activities and events. It is prepared to contain the best types of development and qualitative investment for decades to come. It owns a fully-fledged heritage village that has several buildings, which were constructed over the years using various versions of architecture which is an additional value to the festival. The festival has enjoyed special partnerships over the years with most of the institutions and ministers of the state in addition to a partnership with the thirteen regions of the state to grab competencies, talents, craftspeople and artists, etc. and to introduce the diverse culture and heritage of Saudi Arabia. The festival hosts a country per session to introduce its culture and heritage in addition to the participation of the Arabian Gulf Countries in permanent premises to also show its culture and heritage. The festival introduces a harmony that combines the fragrance of villages in its beauty and its machismo through camel racing and developing the old art to be included in a modern technology through operetta.

2) the weaknesses²¹⁹ of the festival are represented in the lack of interest in implicit or apparent knowledge that is created by the festival. This explains the massive shortage in information because of the absence of a database that conserves the journey of the festival in all its activities since its inception. Also, there is no particular library that combines all of its publications, brochures, documentaries, the print and audio-visual media. It is difficult to contact to the administration of the festival or to get to its publications or to gain access to its own public relations. There is a lack of interest in the scientific orientations that benefit the festival or that make the festival useful at the level of scientific research, academic theses, and developmental ideas. The festival website on the Internet is very simple and boring and does not provide renewable useful information that enhances the festival and its lengthy tenure and journey. There is also lack of transparency on how the individual visitors of the festival are chosen. The urban planning of this location is ill-considered, and the buildings of the heritage village are randomly developed. The festival administration's work, structure, specialization and its planning for the festival are not clear at the middle and the far level. The management of the festival's expenses and incomes are unclear. The advisory committees of the festival and the standard of their invitation are unclear. There is also a lack of planning schemes and professional architecture, as well as a lack of a development strategy for the festival, and the lack of awareness of the importance of creativity, innovation and design that can be enhanced by the festival. To reach the festival, visitors rely on private transport, which takes up more space for parking purposes than the space dedicated to the activities of the festival. Riyadh city tram line is not connected to the site although it is very important.

3) There are qualitative opportunities included in the festivals. The most important are the Islamic religious values. It is considered the most important cultural festival in Saudi Arabia and it is hosted by the world's most important capital, which has a strong influence in the world oil policy and its political, economic and security sponsorship of the most sacred of Muslims in both Mecca and Medina. One of the rare opportunities is cultural and heritage diversity, but all are combined under the Islamic religion. Saudi Arabia is also a

²¹⁹ This situation was in 2016.

large local market and is open to all the world's products. It also has global memberships, including the world trade organization and the Gulf Cooperation Council (GCC), and it is one of the world's 20 most powerful economies. Also, most of Saudi Arabia's population is young, and its family ties are largely cohesive, and love of religion is given priority over everything.

4) Regarding the challenges, it is the determination of developing the festival and turning it into an urban and cultural renaissance project. That is because Saudi Arabia does not lack the material resources, such as money and urbanization, nor does it lack the moral resources of civilization, culture, heritage, or intellectual resources, and intellectual resources of the nation that are fully aware of its religion and civilization, and which are capable of absorbing the progress of knowledge and benefiting from the experiences of cultural and heritage peoples. Al-Janaderiya proves that the society of Saudi Arabia has a huge cultural and heritage accumulation that can be a base from which the new generation moves towards a modern productive culture which is full of originality. Therefore, the festival needs creative development leaderships that enhance it, to be within the pace of the current era which is based on cognitive economy, innovation, creation and designing, not on the old mindset based on celebrations or traditional economy. The festival might face a lot of challenges if it wanted to develop into a civilized position, and a productive developmental national project that works throughout the year as a stage to produce innovation, creation and designing that is based on the Islamic identity and Arabic originality.

This scenario encourages handing the festival over to competencies and minds that believe in the culture of designing and innovation thinking, not in the culture of reproducing and imitating the old minds that believe that culture and heritage are a renaissance not a boom! This needs the promotion of the development of culture and heritage by the public and private companies, institutions and agencies that participate in the festival, etc. (institutional entry), developing the concept of culture and heritage by improving the innovative and creative taste of the festival, including guests, craftsmen, artists, businessmen, etc. (the applied entry), activating the concept of culture and heritage by focusing on in-depth knowledge, interactive education, field studies and scientific research; in

addition to exploring and documenting the life-forms of the original society through individuals and material and moral products. (The theoretical entry), the field studies of Hong Kong, Chinese Islamic cuisine and Chinese silk are simple examples that highlight the importance of culture and heritage. They help us to benefit from others, and help others to benefit from us which is the peak of humanity, that Islam has ordained, God said in the Holy Qur'an:

(يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنْثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا ۚ إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَتْقَاكُمْ ۚ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ) (الحجرات، 13)

“O mankind, indeed, we have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you. Indeed, Allah is Knowing and Acquainted.” (49:13)

9.2. Scenarios Interpretations

9.2.1. Interpretations with general inquires

The following table suggests some important questions about culture-based innovation and how it interacts with the three study scenarios.

<i>Scenarios Interpretations with general inquires</i>	<i>Scenario 1 Realist Scenario (RS)</i>	<i>Scenario 2 Pessimistic Scenario (PS)</i>	<i>Scenario 3 Optimistic Scenario (OS)</i>
<i>The possibility of promoting culture and heritage, to be a catalyst for development of creative thinking, innovative behavior and for ability to design and sustainable production.</i>	It is difficult to improve through this scenario; for decision-making in this trend- apparently- does not possess a precise scientific philosophical vision that clarifies the qualitative developmental goal for combining the authenticity and Contemporaneity beyond the fact that the process is an annual festival. We can say that the current trend is a ceremonial phenomenon rather than being a qualitative development that is utilized for establishing practical solutions that interact with the issues of the pressing development, as the four cases of this study.	Advancement is potential through this scenario, but the economic trends of the Advancement are possible through this scenario, but the economic trends of the decision-makers are unidentified in this scenario: Is it an authentic trend towards activating knowledge economy through promoting the intellectual data of culture and heritage, and expanding creative use of their contents? Or is it just a traditional economic trend "to make culture and heritage goods", thus investing their outcomes in an ideology that gives precedence to glorify "things" for economic profits and for touristic promotion, which would marginalize the strength of "the creative minds" and "the innovative capacities" in showing their abilities for promoting the development with qualitative developmental outcomes?	Development in this scenario is guaranteed; for decision-makers have to draw the features of a qualitative development that gives precedence to "knowledge innovation", "creative behavior", and to raising the worth of "crafts and talents". All of which are of the pillars of an economy that is based on knowledge, and that creates a strong economy based on respect for "thought" and discovering and developing "the skills", which will gradually lead to generating qualitative outcomes that support the economic diversity, strengthen production knowledge and make authenticity a kind of developmental thinking strategy not only about goods and traditional crafts.
<i>The possibility of harnessing the festivals' current components and benefiting from them.</i>	Which of the three scenarios would take advantage of the components, facilities and services of the current festival to varying degrees. At the level of the first scenario, the festival's facilities and services will be expanded as the need arises, for example, the enormous expansion in parking lots, and the expansion in the facilities of the festival's village. However the researcher could not obtain a defined urban and planning strategy for such a trend. At the level of the second scenario, most probably, the trend is going to be towards investing the festival's location and activities, in a way that achieves the largest material benefits through selling the handicrafts and the heritage industries, in addition to privatization of services and facilities and profitable rental of locations. In other words, the festival will turn from a ceremonial ideology that has been spent on into a traditional economic one to collect money from. At the level of the third scenario, the expectations head for finding a qualitative shift in		

<p><i>The possibility of taking advantage of the festival's current expertise.</i></p>	<p>investing that is based on knowledge innovation, through the Saudi minds and skills of all ages and specializations, and that head for taking advantage of the current location, facilities and services and developing them in line with the society and economy that are based on knowledge within short-term, medium-term and long-term plans. We will review this in the concept of developing the festival.</p> <p>It is certain that the festival embraces specialized skills in the field of culture and heritage, but through this scenario, the thought of these competencies and experiences will be restricted within the festival's short time and its limited potentials, thus preventing them from moving towards creativity and innovation that support the medium and long-term national development that is based on culture and heritage.</p>	<p>The conventional economic trend that is not based on the knowledge economy will restrict the ability of the available skills from moving towards new horizons of creativity and innovation based on culture and heritage in all spheres of the contemporary life.</p>	<p>This scenario is the best environment for containing the skills' ideology and creativity, whether it exists within the festival or abroad, through participation or polarization.</p>
<p><i>The possibility of institutional stimulation for innovation within the official structures and systems</i></p>	<p>In the current institutional situation that is based on the festival, it is impossible to draw comprehensive institutional plans that deal with creativity, innovation and design; because these issues are not the festival's top priority that feed into an annual celebration, aimed at defining the cultural and heritage inheritance only without real mechanisms to enhance its importance within developmental plans and Saudi's 2030 vision.</p>	<p>The precedence of the institutional structure of this scenario will be based on economy and investment as it lives up to the expectations of beneficiaries' interests without prioritizing creativity and design, except in the case of moving towards knowledge society and economy.</p>	<p>The main priority of the institutional structure of this scenario is to stimulate for innovation and design, and it will not overlook the positive aspects of the first and second scenario. This will be clarified through the proposed administrative structure for developing Al-Janaderiya Festival.</p>
<p><i>Enable the society to engage in innovation and design through its cultural and heritage inheritance.</i></p>	<p>The largest portion of the society in this scenario will be within the recipient of information section in the way highlighted by the festival in its annual recurrent system, thus reducing finding renewed outcomes arising from the philosophical social data that for some reason or another did not take its chance within the festival programs.</p>	<p>The economists and investors in this scenario aim to find a consumer society of the outcomes that they want, whatever their quality is; for the material gain rather than quality in innovation and design.</p>	<p>In this scenario which is the best one for activating the society as a participant in the country development before being a recipient or consumer, and it is qualified to highlight the ideas closely related to daily life and the cultural and heritage trends that the society still needs for its positive facts that are consistent with the zeitgeist and the future's developments.</p>
<p><i>The possibility of generating the questions and the continued exploration passion.</i></p>	<p>Generating the questions and exploration passion requires finding mechanisms that encourage the society to participate within the festival's activities, through various, renewed and non-recurrent ideas. So, the best scenario can achieve varied engagements among the society and institutions, and among the institutions and each other, which is the third scenario; for innovation and design always strive to find the newest</p>		

	<p>through the multiple levels of ideas, which may be unavailable within the first scenario; given the short time and the annual replication of the program, nor within the second scenario assuming its pure economic trend.</p>		
<i>The possibility of creating a chain of entrepreneurship based on culture and heritage.</i>	<p>All of these scenarios can find several entrepreneurship that depend on decision-makers and the intellectual and philosophical ability available in each scenario, the best scenario for adopting, developing, supporting and tracking these entrepreneurship is the third scenario; because its success priorities are in generating productive and sustainable entrepreneurship in various areas, which differed from the first festival's trend as a celebration, and the second festival's trend as an economy.</p>		
<i>The possibility of creating a bigger cooperation with the cultural and heritage stakeholders.</i>	<p>All of the three scenarios can find mechanisms with cultural and heritage stakeholders but within different goals. The interest in the first scenario is based on empowering the institutions and bodies by the festival to present their outcomes, not because they have something to do with culture and heritage, but because the festival is a place to review the services and achievements of the institution. Regarding the second scenario, the interests will be instated on the reciprocal economic and investment areas to support finding a system of goods and services of financial and profit yielding. The third scenario, supposes that the entire interest system is a key support in the national development, for its main aim is advancement in country development across all its areas, rather than merely focusing on ceremonies and economy which constitute a small part of the comprehensive development.</p>		
<i>The possibility of using technology in improving culture and heritage.</i>	<p>Using technology in improving culture and heritage is insecure in this scenario; for its priorities are based on celebration rather than supporting the scientific studies, innovation and design, making it without a credible scientific databank that attracts the involved and researchers to present new perspectives derived from culture and heritage, and accessibility of them in various areas consistent with zeitgeist and future aspirations. In this context, a distinction must be made between what the festival presents including the production and the literary and intellectual launches, and what it must present including scientific launches that prompt the development of the innovative and design areas in the field of culture and heritage.</p>	<p>Using technology in this scenario is also uncertain, for fear of harnessing it within pure profitable investment and economic channels without thinking of the consequences of technology, like deformations on the authentic cultural and heritage inheritance.</p>	<p>This scenario, to a large extent can be deemed reliable, when the technology, heritage and culture are combined one of its major priorities is keeping cultural and heritage assets, and the possibility of developing and utilizing them in line with the current developments and future visions, while maintaining the genuine reference of culture and heritage.</p>
<i>The possibility of building development goals based on promoting creativity, innovation and design in</i>	<p>This scenario is concerned with the ceremonial aspects by highlighting the culture and heritage of Saudi Arabia from different regions. Therefore, it is not a side that has the ability to adopt decisions and impose them on institutions, which weakens the festival's</p>	<p>This scenario has developmental goals, but what we fear is the tendency towards traditional economic thought, not the knowledge-based economy, and the activation of the society towards innovation and design, making all the goals formulated in this scenario</p>	<p>One of the main objectives of this scenario is to create leaders, promote development and support decision-makers in terms of innovation and design. The objectives of this scenario cannot be achieved without short-, medium- and long-term development plans</p>

<i>the field of culture and heritage</i>	impact in building development goals in the field of culture and heritage.	based on bringing money from the inheritance.	that enhance the interaction between all state institutions and society, which cannot be achieved in the first and second scenarios.
<i>The possibility of establishing an interactive database-oriented towards the knowledge investment in culture and heritage.</i>	It is clear that this scenario, which represents three decades of the establishment of the festival has not established a research and interactive database oriented towards investment knowledge, culture and heritage.	Assuming that this scenario will establish an information base, but it will be an incomplete rule because all stakeholders in this scenario as previously mentioned, their economic orientations will be based on the principle of material profit more than the principle of intellectual giving, which has to spend money on research and support multiple segments of Innovators and designers.	This scenario is capable of building a strong knowledge base for the Saudi culture and heritage that contains virtual and implicit knowledge and has the ability to interact with the large global database, which is one of the most important outputs of the knowledge era, technology and future developments.

Table 2, Scenarios Interpretations with general inquiries. Source: Author. Fawaz A. Bakhotmah.

9.2.2. Interpretations with perception, apperception and augmentation

The following table discusses the thought of the study on perception, apperception and augmentation with the three study scenarios.

<i>Scenarios</i> <i>Interpretations with</i> <i>perception,</i> <i>apperception and</i> <i>augmentation</i>	<i>Scenario 1</i> <i>Realist Scenario</i> <i>(RS)</i>	<i>Scenario 2</i> <i>Pessimistic Scenario</i> <i>(PS)</i>	<i>Scenario 3</i> <i>Optimistic Scenario</i> <i>(OS)</i>
<i>Culture Perception</i> <i>Criteria (CPC)</i>	This scenario does not activate the importance of the society role in understanding culture and heritage through their participation in understanding by using their observation and meditation skills to enhance culture and heritage by linking them to the six points proposed in the model (CPC).	It is not expected that this scenario will activate the six points of the CPC sample because of the belief of the creators of this scenario that the main objective is to invest cultural and heritage outputs economically in their traditional form without actively participating in their development through the community, educational and research institutions to innovations and designs that fit the orientations of the modern age.	One of the most important objectives of this scenario is to create a society, educational and research institutions able to take advantage of the vast information base harnessed by knowledge and technology in promoting development through the operationalization of cultural and heritage knowledge, both virtual and implicit, which creates an innovative intellectual orientation based on originality and harmony and contemporary, which leads the decision-makers to create/find a community, educational and research systems linking them to culture and heritage through observation and reflection of the six elements contained in the model (CPC), That is what can be considered as a plan near-term to activate the Heritage towards innovation and design. The plan medium-term for this scenario to work to activate the cognition philosophical culture and Heritage through the twelve proposed standards for the model (CAC) to explore the depth of culture and Heritage supporting the mechanisms of creativity, innovation and design which is based on experience ongoing for the two models (CPC) (CAC), which will be established
<i>Culture Apperception</i> <i>Criteria (CAC)</i>	Based on the lack of an intellectual priority for this scenario, it pushes toward the model (CPC) or similar, so this scenario is not expected to activate the importance of the Tacit knowledge of the culture and heritage on which the model (CAC) relies on. The festival deals with culture and heritage as an annual celebration through the explicit knowledge and not as philosophical models that can be intellectually derived. Therefore, the (CAC) model will not be easy to implement if the (CPC) is not approved through finding the specialized competencies that stimulate innovation and design and capable of transforming tacit knowledge into an explicit knowledge that benefits the community and	This scenario does not differ from the previous scenario for the CAC.	

<p><i>Culture Augmented Net (CAN)</i></p>	<p>educational and research institutions.</p> <p>This scenario does not differ from the previous scenario for the CAC.</p> <p>It is clear that this scenario tends towards quantitative expansion rather than qualitative. In the sense that the festival expands the representation of institutions, regions and traditional heritage crafts from one year to another, there is no mechanism to expand the productive benefits through the festival program and its participants. Therefore, the visitor to the festival in its current state will stand on the outputs of the review of multiple institutions that is not linked to the culture and heritage in accordance with the era of knowledge and scientific research, so it is difficult to implement the model(CAN)that its knowledge and philosophical inputs have a great relationship to the previous models (CAC)and(CPC), which as we have previously mentioned are difficult to apply in this scenario.</p>	<p>in the long term of a network of interrelated developmental knowledge inspired by various philosophical themes based on culture and heritage, which is sought from the proposed model (CAN).</p>
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Table 3, Scenarios Interpretations with perception, apperception and augmentation. Source: Author. Fawaz A. Bakhotmah.

9.2.3. Interpretations with Observational studies

The following table shows the extent to which the three study scenarios benefit from observation studies, which are best adapted to the experiences, cultures and civilizations of different communities and nations.

<i>Scenarios Interpretations with Observational studies</i>	<i>Scenario 1 Realist Scenario (RS)</i>	<i>Scenario 2 Pessimistic Scenario (PS)</i>	<i>Scenario 3 Optimistic Scenario (OS)</i>
<i>Observational study 1: The institutional cultural approach (Hong Kong Culture)</i>	The status quo of this scenario is one which limitedly benefits out of the cultural system in Hong Kong.	This scenario may benefit out of the cultural system in Hong Kong through continual renewal and not repetition.	This scenario can effectively benefit out of the cultural system in Hong Kong on the levels of governmental care, educational care and societal participation.
<i>Observational study 2: The practical cultural approach (Xi'an Muslim Street)</i>	These three scenarios can benefit from the idea of having a halal-food street in the Muslims' neighborhood of Xi'an with respect to what is compatible with each scenario, no matter whether it was a carnival, an economy or an innovation. It is important to note that what mostly makes this street special is it being a developmental project prompted by activating the daily societal factors in a manner that makes it a vital place filled with creativity and innovation through people's encounters with the halal version of traditional Chinese foods and drinks. Hence, in China in general and particularly in Xi'an, this place has become one of the most significant tourist attractions due to the Muslim religious culture which promotes the development of methods to make halal drinks and cuisines.		
<i>Observational study 3: The theoretical cultural approach (Kesi Silk Heritage)</i>	This scenario can benefit from the significance of a craftsman in China where he is regarded as an intellectual person and a professional in his craft. Since the Hong Kong and Chinese society views these craftsmen as professionals and not merely as craftsmen, they can passionately and optimistically talk about their crafts and how it could possibly develop with the co-operation of other specializations and attracting the society.	This scenario can benefit from the idea of the continual revival of the Chinese silk craft in a way that is compatible with this age. This craft, Kesi, began thousands of years ago as a sophisticatedly complicated craft for weaving and copying significant artistic works into silk and not onto paper or fabric. Kesi gradually developed to have its products become the most majestic silk textiles specifically woven for emperors and those of equal status. They have also become presents given to people of high status around the world. This craft then developed to be conducted upon request used for making many personal and domestic products.	This scenario shall definitely benefit from the diverse lifecycle of cultivation, extraction, weaving and embroidery of silk in China, where this craft rapidly prospers in accordance with this age's demands. Hence we notice that innovative, creative and design works are constant on the levels of craftsmen, academic research and commerce.

Table 4, Scenarios Interpretations with Observational studies. Source: Author. Fawaz A. Bakhotmah.

9.2.4. Interpretations with justification of people

The following table shows which of the three scenarios of the study corresponds to the orientations and ideas of those who have been taken to the festival by intellectuals, respondents and organizers.

<i>Scenarios Interpretations with justification of people</i>	<i>Scenario 1 Realist Scenario (RS)</i>	<i>Scenario 2 Pessimistic Scenario (PS)</i>	<i>Scenario 3 Optimistic Scenario (OS)</i>
<i>Scholars Interview: future is in our religion, civilization and culture</i>	All of the interviewed intellects displayed acceptance towards the carnival idea. To them, however, The carnival requires comprehensive development for it to be included within a diverse developmental ideology and not merely to be considered a carnival.	All intellects emphasize on maintaining the traditional and cultural origins, and preserving them by meticulously developing them through thoughtful intellect that combines them with the age demands with no deformation of their origins.	Intellects believe that tradition and culture have promising domains in Saudi Arabia, if they were dealt with open-mindedness and a philosophy that is inclusive of all developmental aspects, and, if society, educational institutions and relevant governmental and private bodies were activated.
<i>Citizens: Life, crafts and struggle of our ancestors are innovations</i>	From what is gathered from their opinions, one can deduce that the carnival is necessary in preserving culture and heritage. However, it still needs improvement for it to be compatible with developmental demands of products and services in a way that enables numerous job opportunities. Accordingly, they agree with above intellects.	From what is gathered from their opinions, if the carnival is meticulously developed, then, it can shift from looking for profits to having staff and providing job opportunities through training or through having the society share transitional plans that were suggested in the study.	From what is gathered from their opinions, improving the carnival is a necessity for it to be a developmental project that achieves the objectives of this study.
<i>Organizer opinions: open-minded for any applicable creative ideas</i>	Organizers believe that the carnival is accomplishing its goals, and they believe that a period of two weeks is enough for it as many crafts do not belong to the area in which the carnival is held. The continuity of such crafts, should therefore be reserved for their places of origin.	The carnival organizers have no clear-cut perception of these two scenarios. They however welcome, any new ideas and perceptions.	

Table 5, Scenarios Interpretations with justification of people. Source: Author. Fawaz A. Bakhotmah.

9.2.5. Interpretations with study goals

The following table shows which of the three scenarios of the study fulfills the study goals and objectives.

<i>Scenarios Interpretations with study goals</i>	<i>Scenario 1 Realist Scenario (RS)</i>	<i>Scenario 2 Pessimistic Scenario (PS)</i>	<i>Scenario 3 Optimistic Scenario (OS)</i>
<i>First goal: To transform culture from a national festivals into a national project, etc.</i>	Maintaining this scenario as it is would make it impossible to activate the four objectives of this study.	Should the orientation of this scenario be towards the current diverse traditional economy and not towards the desired perception that is based on society and economical knowledge, then these objectives will not have any positive effect in developing the kingdom.	This scenario can transform culture and heritage from being a merely rigid heritage which we seek to maintain to an innovational and a creative force with the ability to build a prominent path out of the diverse economical paths. This can be done by activating the cultural anchors: religion, history, civilization, products, sciences, architecture. So that such anchors would be sustainable inputs which result in competitive innovative designing outcomes that are compatible with the age demands, and, carry the legacy, origin and identity of the Arabian Peninsula. They would also effectively coordinate between the three worlds (the realm of people, the realm of ideas and the world of entities) in accordance with the political, economic, scientific and societal situations. Applying this scenario can prove that both culture and heritage could be an inspirational source and effective methodology for innovation and design by knowing their elements, entries, secrets and specializations.
<i>Second goal: To activate the apperception of culture</i>			
<i>Third goal: To understanding that creativity, innovation and design are shaping the realms of ideas, things and people qualifications.</i>			
<i>Fourth goal: to prove culture as a methodology for innovation and design.</i>			

Table 6, Scenarios Interpretations with study goals and objectives. Source: Author. Fawaz A. Bakhotmah.

9.3. Janadriyah Innovation Model (JIM)

The National Festival of Heritage and Culture has been defined by the conducted field study as a national initiative that launched three decades ago to act as the core of a continuously progressing system based on knowledge as well as cultural and heritage experience, which in turn is abundant within the Arabian Peninsula civilization before and after the existence of Islam. Therefore, The Festival, whether on the financial, moral, functional, and visual sides, is considered a profound historical National Cultural Knowledge. It is also a spatial diversity holding thirteen different administrative zones within Saudi, most of which vary in its heritage and cultural characteristics but are all united under the values of the Islamic religion, and the originality of the Arab Islamic civilization. Based on the genuine knowledge of this content, the Festival presents a new cultural concept, which could be invested in the exploration of the practical and scientific determinants of both the perceptible and implicit knowledge of the Arabian Peninsula civilization, motivates the discovery of diversity through encouraging Innovative Cultural Models. This could be achieved whenever the festival is being propelled toward creative thinking and innovative approaches. If this has been achieved, then we might be able to witness the birth of a new professional generation, owning numerously high innovative and intellectual levels. This generation will have the ability to absorb and devise the Arabian Peninsula civilization, which could be converted into products, services, and theories holding a national identity that is compatible with the modern tastes, the magnitude of the information, in addition to global competitiveness. This paradigm shift could only be achieved in the festival via three Principles:

A. The first principle

The understanding of knowledge resources that improve the culture and heritage of Arabian Peninsula as well as dealing with it as an inexhaustible resource of data and information as long as there is a continuous notice, discovery, and production that complies with the present and future needs. Anas Weigend²²⁰ indicates that the amount

The former Chief Scientist of Amazon.com, the expert on big data, consumer behavior, and social-²²⁰ mobile technologies, the combination of which he calls the Social Data Revolution. **Invalid source specified.**

of data and information will multiply tens of times in the coming years, and most of the additions would be about social information. He adds that the most important part of these additions is the possibility to see better productions using social information. In fact, this is what we tried to clarify through highlighting the abundance of information and thoughts within the literature review and case studies as well. A noticeable part of the social information revolution Weigend talked about is generated from the resources of cultural societies that we tried to highlight and outline in Culture Perception Criteria (CPC) and Culture Apperception Criteria (CAC). Therefore, we are required to keep up with this revolution by finding mechanisms to invest in numerous fields, and the most important innovation and design.



Photo 11, The location of the Saudi National Festival for Heritage and Culture, Riyadh, Kingdome of Saudi Arabia. Source, Google Earth.

B. The second principle

About the idea of Augmented Culture Net (CAN). This idea generated from the mechanisms previously mentioned, and suggested to activate the data, information and knowledge revolution related to culture and heritage. Developing such a network will fulfill a realization and depth in connecting the achievements and experiences of the past with the

present data and expectations of the future. Moreover, it will connect the overt part of knowledge with the covert part that needs to be discovered and analysed from its resources as individuals or huge data such as Wiegand indicated. So, we are talking about a suggested network with more interference and interaction with all cultural and heritage life aspects of societies. There is no doubt that this network needs programming and artificial intelligence sciences which are able to analyse, install, and understand the values of societies, the previous experiences, the industrial opportunities, the quality of science, and the best construction, in addition to the important human relations, experiences and needs, and all material and moral surroundings.

C. The third principle

Enabling what is above mentioned. We need to take a look at "the business reality" at the present and how it deals with cultural and heritage information. The researcher suggests that the business reality today focuses on the revival of the old in order to mimic it or process a humble development on it. Unfortunately, this kind of investment is only made to earn money and benefits, but not to generate new things through innovation, invention, and design. Thus, a real investment shall begin with developing the business reality through motivating "the world of thoughts" to discover. The world has begun to move from traditional dealing with data and information to revolutionary and imaginary dealing using the methodology of "data discovery" and other methodologies related to the third level of thought, which according to Ibn Khaldun is the Speculative intellect. The researcher considers design thinking as a new methodology in this field as it motivates "the world of individuals" and most importantly talented, craftsmen, designers, entrepreneurs, etc. to notice and discover culture and heritage from traditional and electronic knowledge resources in order to generate the sustainable innovative behaviour that progressively fulfills "the realm of things" generated from available cultural and heritage resources and opportunities.

In accordance to what was mentioned, the researcher put Janadriyah Innovation Model (JIM) to upgrade Janadriyah festival to become a national

productive development project based upon the aforementioned principles, as well as a forum of creativity, innovation, invention, and design. (see figure 9.1) The researcher suggests that the structure of this project should be based on the Cognitive dimensions of this thesis as follows:

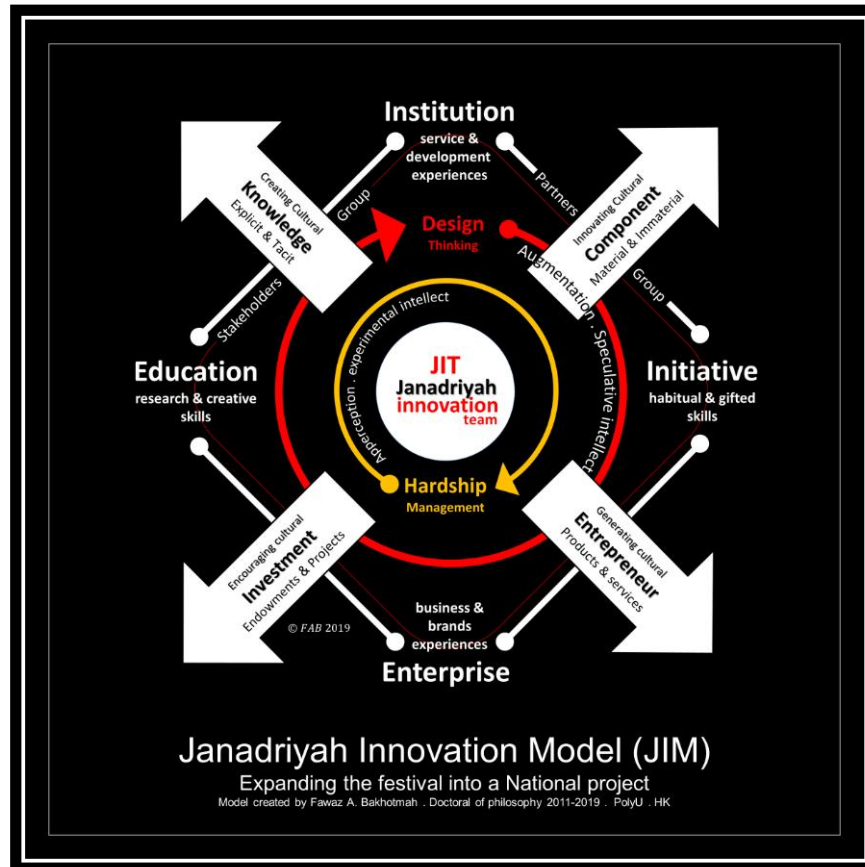


Figure 9.1 Janadriyah Innovation Model (JIM) is a prosper model for Expanding the Saudi National Festival for Heritage and Culture into a National Project for Innovation and Design. Model Concept by. Fawaz A. Bakhotmah.

9.3.2. Janadriyah Innovation Team (JIT)

It is an innovative team that works on activating the third scenario, which resulted from a comprehensive vision supported by literature reviews, field studies, intellectuals' meetings, and questionnaires. They all indicate that culture and heritage are generators of innovation and creativity and design, as well as a true starting point from which a paradigm shift can be found in the field of development based on knowledge economy towards generating sustainable qualitative outputs. The basis of this development is to benefit from available assets for festivals by relying on national skills and competencies. The suggested innovation team for the national festival development can be: 1) a "legal" working team consisting of employees performing their jobs within a

defined place and time like any typical management system. 2) Or a "moral" working team whose members will only maintain contact through a website designed with high potential for creativity. The members of this moral team are 1) competencies of Saudi society, 2) interested people, 3) partners, 4) some of the world's great innovators and designers in the field of culture and heritage. These members will perform their jobs within virtual communication unlimited by time or location and within a non-traditional management system. The mission of this team is to use their experiences, studies, and discoveries to activate the Saudi heritage and culture by innovation and creativity, not by the traditional economy or regular festivals. The suggested website should be flexible and expandable to attract different segments of society in order to benefit from its knowledge value through multiple programs concerning development, education, competitions, services, entertainment, and improvement of the innovation and design by culture and heritage that suits different education levels. This team cannot be referred to by any old descriptions such as a consulting committee or the consultative meeting team. It is a true creative and innovative team working collectively throughout the year and can meet in person or virtually and has a system and executive regulation that its success is determined by Janadriyah Hardship Management success (JHM). What should be considered is that innovation and design are strategic goals to make this festival a promising development project. This can only be achieved through investing the cultural and heritage overt and covert knowledge by the quality of present inputs using a smart connection between past and future. It is said:

The future is unwritten, but how we imagine it to be can influence present attitudes and behaviors, much in the same way that our individual and collective histories can define who we are and how we act, as most psychoanalysts will tell you. In other words, both past and future are always present."
(Watson, 2012)

9.3.3. Janadriyah Hardship Management (JHM)

The abovementioned innovation Janadriyah team is not the management of the festival development project, but the strategic and intellectual store of

developing the suggested project and the skills of the project management. The project management is a true management of an active system working hard with effort and determination to lead the festival as a development project to succeed taking the importance of the outputs (JIT) and ideas and decisions into consideration. John Adair sets a fundamental and international principle of leadership which says that good leaders are defined by their abilities to face the hardship of work not only by managing it, but also by feeling and practicing it. He says:

“There is the authority of position and the authority of knowledge – ‘Authority flows from the one who knows.’ But sharing in hardship confers upon a leader something quite rare – moral authority.” (Adair, 2011 (Kindle))

Adair discovered this creative management orientation by studying the Prophet Mohammed (PBUH) which proves that culture-based innovation is not about material outputs, but also leadership, management, and service outputs. This assures the importance of dealing with the cultural resources mentioned in chapter one by thinking outside the box, but this cannot be achieved unless by using apperception through the cultural explicit and tacit knowledge. Thus, it is important for the administration to base its work on this thinking and motivate individuals, institutes, interested people and partners also to make use of it. In order to accommodate this orientation, the idea of this thesis which is Culture Apperception Criteria (CAC) can be used as it is capable of discovering culture and heritage as well as extracting numerous relations based on innovation, and most importantly:

1. A Combination of new: Joseph Alois Schumpeter, in 1934 identified innovation as “an outcome of new combinations made by an entrepreneur, resulting in a new product, a new process, a new source of supply for raw materials or other inputs, a new market, or a new way of organizing business” (APCTT-ESCAP, 2011, p. 68) Larry Keeley, Ryan Pikkell, Helen Walters and Brian Quinn added that "innovation is key in two situations: when you need to drive new growth from your current assets and capabilities, or when you need to change the dynamics of your current markets" (Larry Keeley, 2013)

Darin Eich also added that the “new innovation could be for a product, service, message, method, or new and better way of doing something” and he highlighted that the innovating people who are “working on a challenge by developing and launching a new idea for a desired outcome” (Eich, 2014)

2. Solving a problem: Kees Dorst is looking to Innovation as “right angles to current problem-solving” as well as “entailing a massive and fundamental shift in how people and organizations see a problem, how they think about it, and what they do to address it” (Dorst, 2015) Rémi Leclerc also added that innovation is “creativity applied to solve a specific problem. It can be viewed as occurring on the individual, team, organizational, industry, and societal levels. (Leclerc, 2017)

3. A developing idea: Darin Eich identified innovation as "more than just creativity or idea generation. It includes the development of the ideas... further refinement, and implementation of the idea with a goal of solving the problem or responding to (the) challenge with something of value" (Eich, 2014) A better product: Bettina Von Stamm has identified innovation as “the creation of better or more effective products, processes, services, technologies, or ideas that are accepted by markets, governments, and societies” (Stamm, 2008)

4. Global competitiveness: Since “Globalization’ has become one of the defining buzzwords of our time – a term that describes a variety of accelerating economic, political, cultural, ideological, and environmental processes that are rapidly altering our experience of the world." (Allen, 2011, p. 175) due to these circumstances Frank L. Bartels is looking to Innovation as a central driver of economic growth, development and better jobs. It is the key to successfully competing in the global marketplace. Innovation provides the answer to numerous economic and social challenges, whether recovery from financial crisis, slowing climate change or winning the fight against deadly diseases. It is the source of improvements in the quality of our everyday life. Harvard Business School identified innovation as a competitive advantage given to an organization that is doing business (Harvard Business Review, 2009)

9.3.4. Janadriyah Design Thinking (JDT)

If the festival project management was acquired to understand the innovation based on culture through apperception in order to structure and manage the proposed projects facilities, the activation of that innovation needs a deeper talent. This is the reason behind the need to design thinking in order to analyse and install the ideas in extraordinary ways or by thinking outside the box. This needs to discover the culture and heritage experiences as well as extract and know the accumulated cultural relations. It also needs to insert design in all project facilities strongly and to know its importance as an innovative, creative, and democratic discussion culture practiced between individuals or institutions. Amongst the most important characteristics of design are imagination, deep understanding of the case, and exploitation of experience to accomplish development and change for the better. Furthermore, design represents the added value, especially concerning business and service sector, so all development indications of developed countries emphasize the importance of designers and their role in economy and business as detailed in chapter one.

In order to accommodate this orientation, the idea of this thesis entitled Augmented Culture Net (ACN) can be useful, as it is based on the design thinking. This thinking methodology is not limited to designers specialized in designing but includes all minds that want to think creatively. As Norman Potter said "Every human being is a designer" (Potter, 2002), there is no doubt that through his experience, he meant that every human being is a designer in the field he/she works in, regardless of the nature of the work. For instance, the doctor, economist, legist, judge, author, and distinguished professors meet with each other through the creative thinking, innovative work, and the orientations of their careers regardless of the differences. Tim brown mentioned that design thinkers have five skills related in one way or another to the skills of a designer, which are: 1) Empathy: the ability to imagine cases from different angles according to analysis, management, and organizing variable data, and to develop appropriate solutions with minute details that enhance the sustainability of material and moral innovation outputs. 2) Integrative thinking: the ability to deal with the realty full of problems and contradictions, where the need of complete thinking translated into alternative productions compatible

with reality and fulfills contemporary life needs. 3) Experimentalism: the ability to sustainable variation and walk through new directions by discovering problems in an innovative way not generated from traditional thinking, boring experiences, or repeated and routine discussion. 4) Collaboration: cooperating and flexibility are among the requirements of this era to solve cases, due to the variety of experiences and complexity of productions and services. In other words, collaboration is not about instructions between one party and another like before, it currently represents the integration and performance of different specialties, skills, and thinking methodologies without having differences regarding achieving goals. 5) Optimism: to push toward continuous enthusiasm when dealing with problems and challenges and agreed goals, without paying attention to what causes frustration or reluctance to proceed forward.

It can be said that the festival project management shall be leading, brilliant, and creative in two things:

1. To manage the complex institutions...change does not occur in a perfectly linear sequence, but through feedback loops within this system. (OECD, 1997)
2. To manage the complex of creativity, because, innovation is more than personal creativity. It is the process of taking new ideas through to satisfied customers. And it occurs at every stage in any business" (Adair, 2011 (Kindle))

9.3.5. Janadriyah Stakeholders Group (JSG)

According to the media report of the national culture and heritage festival session (32) of 2018, the number of Saudi institutions and governmental sectors in the festival (47) was (56) according to the statement of the festival director distributed to three levels: exhibitions, suites, and buildings, and the number of the Arabian Gulf Countries that participated in that festival was three in addition to a fourth country as a guest. The report did not mention whether or not there was any private sector participants, but the classifications sponsors of the festival were (9) with a total of (25) sponsors most of which were media sponsors. We, through this study, questioned if the current festival administration has any development goals based on improving innovation, creativity, and design in the field of culture and heritage, does the festival care

about establishing an interactive database directed towards the knowledge investment in culture and heritage? And is the relation between the festival and home based on national motivations driven by the ideology of originality and authenticity, or development motivations driven by the contemporary ideology and knowledge abundance to build a modern civilized model that amalgamates originality and modernity?

We answered these question in one way or another through the scenarios, and we concluded that to have these optimistic answers, the festival administration must work on developing the festival by using the third scenario. Saudi demands a paradigm shift in creativity, innovation, invention, and design more than its need for festivals and earning money. Hence governmental and private companies, institutions and organizations participating in the festival shall adopt creative motivations that lead to a positive and interactive development of culture and heritage using their responsibilities and potentials on the financial, legal, legislative or regulatory level. The questionnaire showed great importance of the ministries and governmental foundations participating in the festival to have their own perspectives of supporting the culture and heritage creatively and innovatively and not only to show their traditional services and achievements. Moreover, all participants including private and public sectors and individuals must have a goal and a message leading to activating our culture and heritage by adopting creative, innovative, or entrepreneurial ideas either local, regional or international in order to prove the ability of culture and heritage to generate many of the initiatives and opportunities. Built on what is mentioned, this study clarified that the continuation of presenting the past with the same methodology while we are living in a new century full of knowledge, technical and technological revolutions will lead the next generations to the idea that the original values and identity is tightened by the old legacy, and that heritage is not developable and is incapable of generating new creative and innovative knowledge. Though the opposite has been proven by Janadriyah as it shows the great amount of culture and heritage inside the society of Saudi including religion, values, traditions, arts, and crafts, singing and musical instrument, costumes and fine arts, literature and poetry and Nabati poetry, dancing and popular games, camel racing and horse riding and falconry, etc. This can be the

starting point for the new generation to a contemporary productive culture with the spirit of originality. The researcher suggests classifying Janadriyah Stakeholders Group (JSG) into four groups as follows:

9.3.5.1. Stakeholders of Government Institutions (SGI)

They are the people of "moral interest" which represented by the facilities, services and governmental decision making that supports the knowledge economy and society. This classification includes all ministries, institutes, governmental organizations and sectors and it represents most of the participants in Janadriyah. Though, these key players should upgrade its services through developing centers or general administrations privately for innovation and design, as the current office is in the festival or in future the permanent office for innovation. System and goals of the suggested center for the participating actor in Janadriyah must be based upon the design thinking (JDT), and its plan, innovative program, and its incentive prizes must be discussed transparently with (JIT) and approved by (JHM). It must be assured that this office is not for highlighting the services or achievements of the key players, is currently the case, but a place to interact with the society and other institutes in the field of thinking, development, innovation, establishment of incubators, highlighting the competencies, presenting the outputs of productions and services in the field of innovation and design. It is must be noted that the basis of this classification is the selectivity of offices related to individual key players and avoiding repetition except for cases of interest that serve innovation and design. These key players shall be confident that:

Innovation is a social phenomenon similar to diffused creativity. It is the result of a sort of collective mind, formed not only by the minds of people but also by cognitive prostheses, or rather the interaction of a natural mind with artificial systems and technological instruments (cellular phones, computers, internet, data banks, codified routines, and so on). This also holds true for innovations in the art world, unlike the creativity of a single artist. (Legrenzi, 2005, p. 49)

These key players shall know that they are doing great national work to find a generation of design thinking and innovative behavior built by motivation and producing innovative productions.

Motivation is a general term for a group of phenomena that affect the nature of an individual's behavior, the strength of the behavior, and the persistence of the behavior. (Stamm, 2008)

9.3.5.2. Stakeholders of Private Enterprises (SPE)

They are the people of "material interest" represented by support, production, adoption of ideas and innovations and designs, and the financial and business industry. This classification includes private sector institutions such as banks and well-known trademark owners who desire to have the Saudi culture amongst their economic activities or their commercial aims. These aims are first and foremost generated from supporting innovation and design, and not restricted to earning money or exploiting crafts in developing their companies without material or moral reward. There is no doubt that setting such conditions on private sector institutions may not be desirable in the beginning. However, when the festival project management, the innovation team, and governmental organizations prove their capability of supporting and protecting talented individuals by its intellectual power and investment channels, the private sector will seek to gain an active role within the project. It should be mentioned that the project must not go easy with institutions with a superficial understanding of culture and heritage or its humble support, thinking, or vision towards innovation and design. It is important for organizations included in this classification to know that they were attracted to Janadriyah development project due to:

Develop a more positive culture (by) Develop new products, offer new services, generate new sources of revenue... collaborate, learn and develop.” (Eich, 2014) in other words ‘innovation has a wide range of activities (IBM Melbourne Institute, 2010)

9.3.5.3. Stakeholders of Education centers (SEC)

They are the people of "knowledge interest" represented by research, development, improvement of education and learning as well as making it based on creativity and innovation. This classification includes educational institutions, and talent, innovation and developing centers, etc. it must be noted that it should not be confused with the abovementioned governmental and private centers. Where the project management should determine with the interested people whether the mentioned institutions' participation is to facilitate service providers, support competencies, and talents, and make development decisions generating from culture and heritage, or their participation is about the scientific research skills and distributing the culture of discovery, education, and creative intellectuals' industry. In other words, this classification shall include institutions interacting scientifically and practically with all knowledge resources and big data, and urging society to observe, search, discover and mediate. The main goal of the people of "knowledge interest" should be the industry of creative knowledge available for the society and governmental and private institutions, whether paid or for free. This classification also includes organizations of programming, social media, multimedia, movies, animation, and virtual reality. These institutions should know that:

"Innovation is done by people and rests on their creativity and skills. The education system has to provide people with skills and promote their creative potentials. Learning enlarges the knowledge base of the workforce which is the main ingredient for the innovative capabilities of organizations. Public science supplies industry with new findings that form a knowledge base for industrial R&D. New technologies resulting from basic research often stimulate innovation activities in the enterprise sector. (the Deutsche Telekom Foundation, 2011)

9.3.5.4. Stakeholders of Individual Initiatives (SII)

They are the people of "individual interest" based on what the society abounds in skills, talents, and imagination. This classification includes the polarization of craftsmen, talented, creators, innovators, artists, and

designers who desire to be included in the festival development project. The festival deals with such individuals as creative minds with great enthusiasm regardless of their age, gender, or education level. They play a crucial role in activating the society and raising awareness as well as distributing the culture of creativity and innovation. These individuals should also know that innovation is:

“integrative and aspirational... the ability of individuals, companies, and entire nations to continuously create their desired future... new ways of doing and seeing things as much as it is about the breakthrough idea” (Kao, 2007) they have to also know that “Innovation is helpful for individuals who want to: Do much more with much less, succeed sooner and have more options. Be more creative and effective in work and life, make rapid progress on a challenge, and solve problems and seize opportunities. (Eich, 2014)

9.3.6. Janadriyah Partners Group (JPG)

Although the festival has been held for the past three decades ago, it is still typically and repeated without any paradigm shift to be a "center of civilization" or a "development project" that improves the human, construction and civilization development for Saudi scientifically and practically. Moreover, the festival with its potential and vast experience has not suggested any Islamic economic theory that improves the social strategy and the economic knowledge through culture and heritage. In other words, this festival has succeeded in collecting and highlighting many of the cultural and heritage origins of the Arabian Peninsula, it also succeeded in the spatial expansion as it became a seasonal cultural village that attracts hundreds and thousands of visitors. To some limit, the festival has succeeded in gaining media attention as well as that of writers, but it did not actually succeed in producing extraordinary outputs consistent with the importance of the royal sponsor, the greatness of the participants including interested people and decision-makers, and the maximum benefit of authorized sponsors. In other words, we cannot say that the festival in its current situation has helped with the Saudi development problems, especially the four cases mentioned in this study. We also cannot

say that it provided solutions to the economic diversity or the improvement of the strategy of the knowledge society or contributed in developing creativity, innovation, and design, or activated the culture further than festivals and ceremonies and other traditional activities. We suggest four outputs that are consistent with the potentials and total performance of the festival development project that provides solutions to the decision-makers in the short term, medium term, and long term regarding the four development cases of this study. The researcher suggests activating the four approaches of culture (institutional, practical, theoretical and conceptual approaches) to act as the predictable outputs of developing the festival, as they will be a fundamental partner in leading the project to success and sustainability. In addition, these outputs will determine the philosophy of modern planning and urban design to the current festival location during the coming thirty years

9.3.6.1. Partners of Cultural Knowledge (PCK)

We need to activate the concept of culture and heritage by focusing on in-depth knowledge, interactive education, field studies, and scientific research, in addition to exploring and documenting indigenous models of community life through individuals and material and moral products. This approach will result in a large, varied and accurate information base that will help to understand the development of culture and heritage in accordance with the originality of the Arabian Peninsula and Saudi contemporaneity, which will prompt interested researchers, innovators, inventors and designers, etc. to develop renewable concepts and ideas linking the past, the present and the future. For example, this approach will provide us with philosophical knowledge about: Endowments in Islam and their relationship with culture and heritage; the integration between the Bedouin/rural and urban/civil societies and how each of them was an extension of the other; the interaction of religion with customs and traditions; the concept of business and industry production in the original Islamic Arab mentality, the concept of modesty and luxury and its relation to the trade and construction in the Arabian Peninsula; the concept of the relationship between the ruler and the construction and the effect of each one on the other either positively or negatively; the concept of collective cooperation between people at the

social and industrial level; the concept of the collective collaboration between people at the social and industrial level; the concept of utilizing human and natural resources and maintain their sustainability; the concept of the five essential purposes in Islam which are: religion preservation, self-preservation, mind preservation , offspring preservation, and money preservation , and how they interacted/ are interacting with culture. The reason is that innovation is increasingly knowledge and skill intensive. As a result of the positive externalities inherent in an investment in knowledge, technological advance and human capital, public policy has been increasingly recognized as having an important complementary role to play in fostering entrepreneurial innovation.

9.3.6.2. Partners of Cultural Components (PCC)

We need to prepare cases in the philosophy of things that takes the individual from limited thinking to the open comprehensive thinking, so the individual can understand the formation of cultures and its patterns and different values, as well as its effect on the formation of material and moral things and its development through time. It is noticeable that there is a distinguished difference between western Christian scientists, irreligious eastern scientists, and Muslim believing scientists. The West exclusively establishes its philosophy upon the mind, and the East exclusively establishes it upon the materials, though Muslims philosophy is neither based on mind or material, it should be based on the faith in the Creator of that mind. As the mind cannot override this, it reflects on the methodology of philosophy and the expected outputs of the culture from the two sides. It is important to clarify that the Islamic Arab culture believes in the necessity of impartiality and tolerance with all cultures to upgrade the culture. The duty of the nation that desires development is to study the minds grown in other lands and to know different ideas and thoughts. Thus, the philosophical method of culture and heritage is considered as an important strategy in this field and should be activated through raising the level of observation, discovery, and meditation to reach renewable components of culture and heritage. This aim cannot be achieved except by raising awareness regarding the importance of sensing the productive creativity amongst the

festival society of visitors, craftsmen, artists, and businessmen, etc. which will gradually lead to innovating new products and services generated from sensing the previous experiences, the present data and the future expectations. In conclusion;

innovation is generally not something brand new but something new to the society in question, which, if broadly disseminated, brings significant economic, social, or environmental change. (International Bank for Reconstruction and Development / The World Bank, 2010)

Throughout this important subject, which may be difficult to understand, it is useful to outline two examples of Tang Ming Xi's works, where he developed a methodology to develop the traditional industries and fine crafts of western China. This methodology is based on the term of culture-based innovation model (CBI) which is previously explained. He called that methodology (Rtttl framework) and it was mentioned in his research "A generative framework for the development of creative" cultural industries for western China". It aims to reach creative and innovative products through developing its originality via three processes based on its design genetics, which are:

- *Translation: converting local and regional meanings of design genes into universal forms of the aesthetic and functional substance of a new design concept.*
- *Transformation: making changes and variations by computational methods in order to increase the populations of an original design gene...*
- *Transcending: the ultimate objective of generative art and design. It must go beyond normal geometric or spatial transformations, in order to create new styles or new forms of innovation."* (Tang Ming Xi, 2014)

Ming Xi indicates that this methodology allows more comforting space than the regular generating system in which many of the designs and their alternatives are made by using multiple programs. The methodology sets an innovative design established by cultural material genetics derived from fine

crafts or Chinese heritage. Ming Xi has conducted another research about creativity and innovation based on the components of Chinese culture and heritage which is "Deriving design and innovation strategies from cultural heritage". This research studied the case of holding a cultural exhibition titled as "Heaven and People in One, Generation by Generation -Shaanxi Culture and Design Innovation", and according to Ming Xi's perspective, this exhibition represents:

"The motivation of this case study is to find out the strength of creative culture industries in western China, and to develop a framework supporting culture based product innovation, through which the knowledge of local artists or craftsmen/women can be integrated to form a collaborative design force".

This methodology practically helps in understanding the process of developing the heritage design genetics mentioned in (Rtttl framework) from the cultural inventory that is called design cultural driving forces. These forces can be concluded by saying that Ming Xi was able to establish a new understanding of cultural heritage, which is: the content of cultures and heritage such as fine crafts and cultural industries do not represent what is gone and finished, but that something this archaic can act as motivation to extract more ideas and innovations consistent with contemporary life and technical and information development. This understanding reached the teaching staff and the new generations of designers who are occupied by western theories. The overt and covert message of the exhibition expressed the perspective of the researcher in an elegant format of deep thought represented by inviting some of the prominent craftsmen in China, so that through their talents they can act as inspiring tools to the future expectations of students, teachers, and designers in Hong Kong.

It is important to point out that Ming Xi has recently prepared a scientific research laboratory called (Silk Road) inside one of the universities of Xi'an city. The researcher is one of the members of the research team, and this laboratory will be a motivation to inspire additional ideas of Cultural

Components and genes, not only at the level of Chinese products but also at the level of other different ancient civilizations that established the Silk Road with China, of which the Islamic Arabian civilization is one of those ancient civilizations. A large part of this civilization's culture and legacy can be discovered in the Arabian Peninsula (Saudi and boarding countries), and this is what opens doors for extensive cooperation between these cultures through the fastest and most important scientific and practical initiative launched by China in the modern era, which is (the belt and road intuitive).

9.3.6.3. Partners of Cultural Entrepreneurs (PCE)

It is important to know that innovation has two aspects: financial and entrepreneurial. As for the financial aspect, innovation works on decreasing costs, providing competitive features, helping to improve the economy, in addition to keeping up with national and international systems. On the other hand, the entrepreneurial aspect sees that innovation generates more competencies, helps the renewability and sustainable development, and provides added value to the fields in which it is involved. This is why it is said that, "innovation is an inspiration, entrepreneurship is a bit of good luck". The more innovation is used as an activating tool for entrepreneurship, the better motivation it is to use the resources positively, through innovation, which can sometimes be used as a resource. From this point, this project will lead to establishing a generation of entrepreneurs specialized in culture and heritage fields. In a questionnaire created by Fawaz Bakhotmah, 84% consider fine crafts as a powerful tool to form the current and future economy, and 96% see fine crafts as a creative platform to generate innovation and design if used by thinking outside the box, that is why 98% see that the development of fine crafts by the interaction between the designer, the craftsman, and the businessman will be more beneficial. The researcher came to a result that we need a smart combination that includes designers, entrepreneurs, and craftsmen in order to develop competitive products, trademarks, and original Arabian services. There is no doubt that the three specialties combined will form a mind that is capable of 1) considering the originality through the needs of contemporary society or vice versa. 2) The adaptation of materials by

inherited experience and skill. 3) A renewable design that complies and interacts with the spirit of the era and its intellectual wealth. It is said that “Innovations come from the entrepreneurs who make them happen and ultimately depend on a society’s receptiveness. Innovation, therefore, is fundamentally a social process.” (International Bank for Reconstruction and Development / The World Bank, 2010)

9.3.6.4. Partners of cultural investments (PCI)

We indicated the need to activate the concept of culture and heritage through concentrating on knowledge and interactive education as well as scientific research, in addition to the discovery and documentation of original forums of social life and its development through time by individuals and material and moral products. We also indicated the need of Saudi to prepare cases specialized in the philosophy of things from an Islamic perspective that takes the individual from limited thinking to comprehensive open thinking of things and its relationship with life and universe. Then we pointed out to the importance of generating smart entrepreneurs that are a combination between the designers, businessmen, and fine crafts. From this combination, we have competitive products, trademarks, and original services, so that when cultural and heritage investment is suggested in relation to the Janadriyah project, it is an investment built on the creativity and innovative philosophy of things improved by contemporary designs reflecting the spirit of originality. So, the investor in the field of culture and heritage should support innovation because it may lead to discovering numerous fields such as new products, new production processes, new materials and resources, new markets, new programs and systems, new kinds of consumable products generated from the needs of the society. Philosophically, this means that investing in a culture-based innovation must not be limited to products, but it is a system of deep understanding between individuals and things through the life cycle of past, present, and future. Hence Janadriyah project should be able to attract non-typical investors by combining the reality and imagination “Imagination is a way of knowing that gives us access to things which do not exist, and it seems a curious fact that this could help us know that which does exist.” (Alchin, 2014) We can say

that competitive "economic development" needs models that highlight multiple ideas in the industry of creative "cultural revolution" that combines originality and modernity. This requires building bridges between "the realm of things" (available potentials and opportunities), "the realm of ideas" (activating the creativity, innovation, invention, and design), and "the world of individuals" (businessmen, talented, craftsmen, and designers).

9.4. Janadriyah Innovation and Design Waqf²²¹ (JID-Waqf)

The researcher suggests that Janadriyah development project through Janadriyah Innovation Model (JIM) be an entrepreneurial idea and a paradigm developmental shift, if it was dealt with as "Waqf" based on developing the creativity, innovation, invention, design, and art, derived from the history, urban, civilization, culture and heritage of Arabian Peninsula in general, and Saudi in particular. The suggested endowment can be titled as Janadriyah Innovation and design Endowment (JID-Waqf) and can be independent and protected by the official systems and laws. This study is not made to talk in detail about endowment, but why Waqf? Waqf or endowment is an important Islamic developmental entity that is in line with the concept of culture-based innovation. As it is one of the inventions of the Islamic society:

9.4.1. Waqf, a Muslim social innovation strategy

Mustafa Abd-u-Salam says in his article "the activation of the role of Waqf in the Arab world": "Muslim and Arab societies knew Waqf and practiced it for fourteen centuries, and that system was –and somehow is- a base to establish the civil society institutions in the Arab world in many social, economic, educational, health, and fields of services. It can be said that it was one of the institutional social innovations that gave the individual a sense of social responsibility, shifting him from "private" care to "public" care towards the society as well as the country." (Salam, 207)

9.4.2. Waqf, a Muslim investment strategy

Waqf complies with development as Sami Assalahat says in his paper "Fundamental principles in understanding the development and investment nature of Waqf": "The term development and Waqf are closely correlated, and

²²¹ "Waqf" is the Arabic terminology name for Endowment

the lingual meaning totally complies with the conventional meaning. The least we can say about Waqf is that it is a development and investment, not limited to exchange until the resource is finished, and it matches the development in all the fields of life" he adds "it is a fundamental condition to upgrade endowments to have the political will that realizes the importance of Waqf, as well as the security stability in the society" (Salahat, 2005)

9.4.3. Waqf, a Muslim development strategy

Many studies urge to activate the role of the Waqf within renewable ideas. As Salim Hani Mansour says in his paper "Waqf and its role in social development" that it became "a necessity to have endowments for social development, which contributes with raising the awareness and experience in production, as well as conscience-raising, providing jobs and training on the crafts, having multiple learning means such as: Waqf for teaching calligraphy, painting, sewing, ceramic, nursing, accounting, raising children, social work and health awareness in order to provide jobs for people and benefit from their time instead of wasting it." (Mansour, n.d.)

Depending on what is mentioned, the researcher suggests taking into consideration ten fundamentals that connect between (JIM) and (JID-Waqf):



Photo 12, The compound of the Saudi national festival for heritage and culture is located in the northern borders of Riyadh the capital of Saudi Arabia within a huge agricultural area called "Arrawda". In general, this area is considered one of the villages' entertainment areas that are frequently visited by Riyadh residents, it also contains entertainment compounds with huge spaces. Source, Google Earth.

9.4.3.1. Waqf; Ownership

All the fixed and non-fixed properties of the Saudi National Festival of Heritage and Culture, specifically the current site of the festival, which consists of five parts, should be transfer to the proprieties of the proposed Waqf project.

9.4.3.2. Waqf; law

All works of Waqf should be regulated by the Saudi law of endowments, as it explains in detail the meaning of creativity, innovation, invention and design based on the culture and heritage, and how these specialties upgrade the development and the society without political ideas or private interests. In addition to the interaction scenario between (JIT), (JHM), (JSG) and (JPG), and (JID-Waqf).

9.4.3.3. Waqf; system

The Waqf system will be closely related to (JHM) and will work actively on devising cultural and heritage ideas from the resources explained in chapter one, and having new Islamic theories or reviving the old inspirational ones that motivate (JIT) activity and improves the thinking of the festival (JDT) with the available resources and opportunities related to culture and heritage.

9.4.3.4. Waqf; thinking

The Waqf thinking system is the same as the thinking system for the Project (JDT), which is divided into two types: an open thinking network between the project and the community, and a closed one among all the components of the mentioned in (JIM).

9.4.3.5. Waqf; collaborate

All urban and architectural development that has been constructed or is under construction or will be constructed on the land of the festival project is either Waqf property or rented from the Waqf, or a joint investment with the Waqf. This means that this land cannot be sold, donated, or gifted, but developed by what is consistent with the principle of culture-based innovation during the next 30 years using a plan that is in line with the

outputs of the project as well as the development strategies in the short, medium, and long term.

9.4.3.6. Waqf; village

The management of the proposed Waqf should maintain the current village of the festival as a workplace for culture and heritage, a permanent center for the annual festival, and a generator for discovery and meditation throughout the year. The village should be considered one of the most important resources and opportunities for the success of the festival development to become a national project, but it needs more attractive urban rehabilitation and thinking. As we indicated in the field study, the current village is the primary generator of the (PCC) outputs, so it has to be developed carefully in order to be an inspirational place for many of ideas, innovations, and designs.



Photo 13, The heritage village of the Saudi National festival for heritage and culture occupies an estimated area of 1,000,000 square meters. Source, Google Earth..

9.4.3.7. Waqf; development

The land of the festival should be developed in accordance with (JIM), and this development should be based on two urban and civilizational strategies, both of which are co-linked with (JDT).

9.4.3.8. Waqf; “al-'umrān”²²²

“al-'umrān” strategy deals with the spatial dimension of the project, where the urban and economic development of the site results from a sustainable philosophical discussion between the components of the project and the community, not as a result of the fixed urban plans. Therefore, the researcher suggests dividing the site according to the expected outputs of the project as follows:

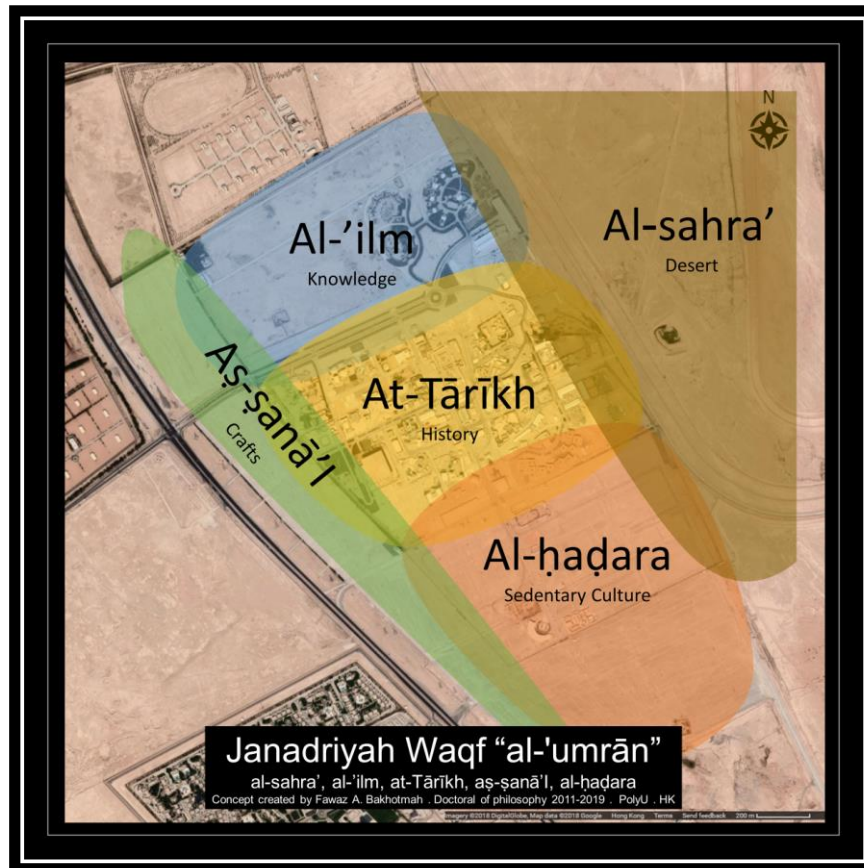


Figure 9.2 Janadriyah Waqf “al-'umrān” is a long-term proposed urban design for the existing festival site. The development of the site results from a sustainable philosophical discussion between the components of the proposed project and the community, not as a result of the fixed urban plans. Concept by Author. Fawaz A. Bakhotmah.

A. The Desert Zone "al-Sahara"

It is dedicated to the culture and heritage of the villages and serves as a practical field for understanding the villages and making desert ideas, innovations and designs.

²²² For more detail about “al-'umrān” read chapter four “Apperception of Culture” (4.1.6) and (4.4.1.6)

B. The Knowledge Zone "al-'ilm"

It is dedicated to the Partners of Cultural Knowledge (PCK), and takes care of all knowledge and culture-based projects such as universities, research centers, institutes or schools of design and innovation, or providing benefits, services and ideas for the development of the society of creativity, innovation, invention and design.

C. The History Zone "at-Tarikh"

It is the current heritage village. It was talked about in the sixth principle and is intended for the development of Partners of Cultural Components (PCC). Its main advantage in this region is that it links between all elements of the project, and it is the basis from which ideas and concepts can be launched and can be referred to thought and meditation. It represents the idea of the center of the old Islamic and Arab cities where the birth of the movement of development was.

D. The Culture Zone "al-ḥaḍara"

It is currently used as a huge park. This area will be dedicated to the Partners of Cultural Investments (PCI) to attract qualitative investments in various fields including trade, marketing, hotels, restaurants, and fashion, etc. and the concept of all should be derived from cultural and heritage dimensions.

E. The Crafts Zone "aṣ-ṣanā'i"

It is a product of the Partners of Cultural Entrepreneurs (PCE). It is a region dedicated to innovative and promising entrepreneurial projects that have evolved through the development of cultural and heritage components to be products, services, or programs, etc. This area is a green oasis, interspersed with a small piece of land granted with a loan to the entrepreneurs and selected by a specific mechanism to carry out the productive work.

9.4.3.9. Waqf; “al-ḥaḍara”²²³

“al-ḥaḍara” strategy. It deals with the moral dimension of the project so that it becomes part of the data that upgrades by thought and behavior of the society and becomes part of its thinking and features. Therefore, one of the goals of the civilizational project is to gradually develop Janadriyah festival project in the short, medium and long term while achieving the third scenario:

A. The short-term,

The promotion and development of cultural and heritage knowledge by existing and available potentials and opportunities on two levels:

1. The first level

To enhance the understanding of culture and heritage by observing, meditating and interacting through educating festival visitors, community and students about the importance of dealing with culture and heritage with a high level of scientific thinking. At this level, we can use Culture Perception Criteria (CPC), and we might need an interactive educational website as well as some stories and creative works, in addition to some programs and electronic games.

2. The second level

To promote the abstraction of culture and heritage by discovering, analyzing and expanding scientific research by academics, researchers, graduate students, etc. In other words, the knowledge of the festival should be activated by using Culture Apperception Criteria (CAC). The researcher used it in field studies and it showed its great potential not only as a compilation of information but as an analysis, abstraction, and suggestion of the most appropriate in development. We need to activate the theoretical approach to culture, and therefore universities faculties of architecture and design should take the initiative and support the festival through its interest in cultural and heritage products by attracting craftsmen to the universities and helping them to hold exhibitions to highlight their skills, talents, and products to university students, researchers,

²²³ For more detail about “al-ḥaḍara” read chapter four “Apperception of Culture” (4.1.5) and (4.4.1.5)

community and businessmen in order to reach variable products of projects, services, and developable theories.

B. The mid-term.

There is no doubt that if the project of (JHM) succeeds, and by the support of (JIT) in intellectually marketing the festival in the short term and with the support of the interested people, then the festival site project will begin to activate and the implementation of the short-term outputs will begin. This will give loans, support and investment of the most important, and here comes the role of the Islamic Waqf in the development of industry and science and upgrading the level of urbanization.

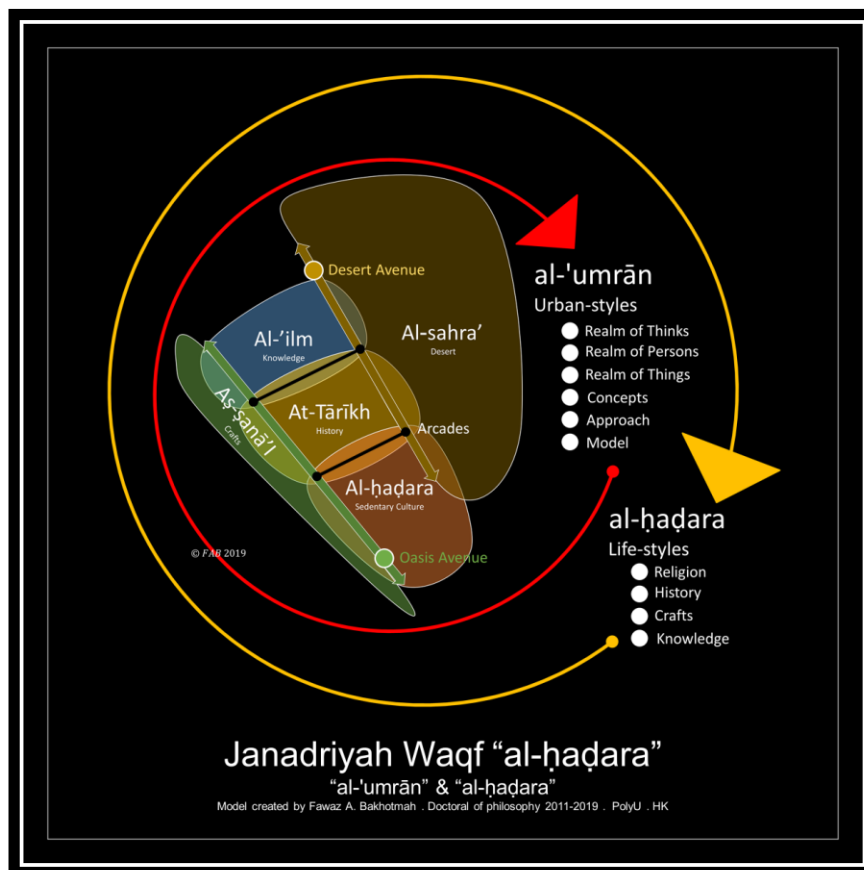


Figure 9.3 Janadriyah Waqf “al-ḥaḍara” deals with the moral dimension of the project so that it becomes part of the data that upgrades via societal thought and behavior and becomes part of its thinking and features. Concept by Fawaz A. Bakhotmah.

C. The long-term,

The site of Janadriyah festival project will become a cultural and heritage park and a promising forum for discussion and the creation of creativity,

innovation, and design. The most important cultural elements that will develop with this project in the short, mid and long term is Villages Avenue, where the villages, their beauty, poetry and pioneers, as well as the Oasis Avenue where the city and its development, innovations, and designs are linked by the Arcades where the constructive communication between the past and the present must be uninterrupted, and this is what implies the concept stated by Ibn Khaldun that "the roughness of the Bedouin (comes) before the softness of civilization".

9.4.3.10. Waqf as a development model

Janadriyah Innovation Model (JIM) and the idea of Waqf should be treated as new inputs into Saudi development that enhances the knowledge economy and Saudi's 2030 vision.

Chapter Ten

Models for Application & Future Framework

- 10.1. Models for Application
 - 10.1.1. Culture Paradigm Shift Model (CPSM)
 - 10.1.2. Culture Artificial Intelligence Net (CAIN)
 - 10.1.3. Culture Bee Innovation Model (CBIM)
- 10.2. Future Framework

10.1. Models for Application

In this chapter, the researcher recommends development decision makers, especially those who work within societies rich in cultural and heritage resources, to work hard to prepare competent generations for dealing with culture and heritage as a revolutionary strategic body of knowledge that contains many creative works, innovations and designs.

Therefore, the researcher hopes those decision-makers at the educational and practical levels use the three models mentioned in this part and develop them, as they encourage to reconsider the traditional cultural and heritage initiatives and make them rise to productive development projects with innovative economic dimensions that take into account the contemporary revolution based on knowledge, innovation and community participation.

There is no doubt that these three models are the result of the researcher's hard work and all his scientific and field experiences that have been discussed in this thesis to make the concept of Culture-Based Innovation rise to be a developmental work at three national levels: civilization, knowledge and industry. The researcher's hard work goes beyond being an individual approach that urges a segment of those interested people or specialists in benefiting from culture and heritage, as is the case in the Bellagio Mandala Group Model, which made the initiative limited in terms of its use and spread, as we explained earlier.

10.1.1. Culture Paradigm Shift Model (CPSM)

Culture Paradigm Shift Model (CPSM) summarizes what was discussed in detail in the first, fourth and fifth chapters, as these three chapters focused on culture and heritage as development tools that foster innovation through three basic concepts: Perception, Apperception and Augmentation. These three concepts are the essence of this thesis (see Figure 10.1), and they can be summarized in this model as follows:

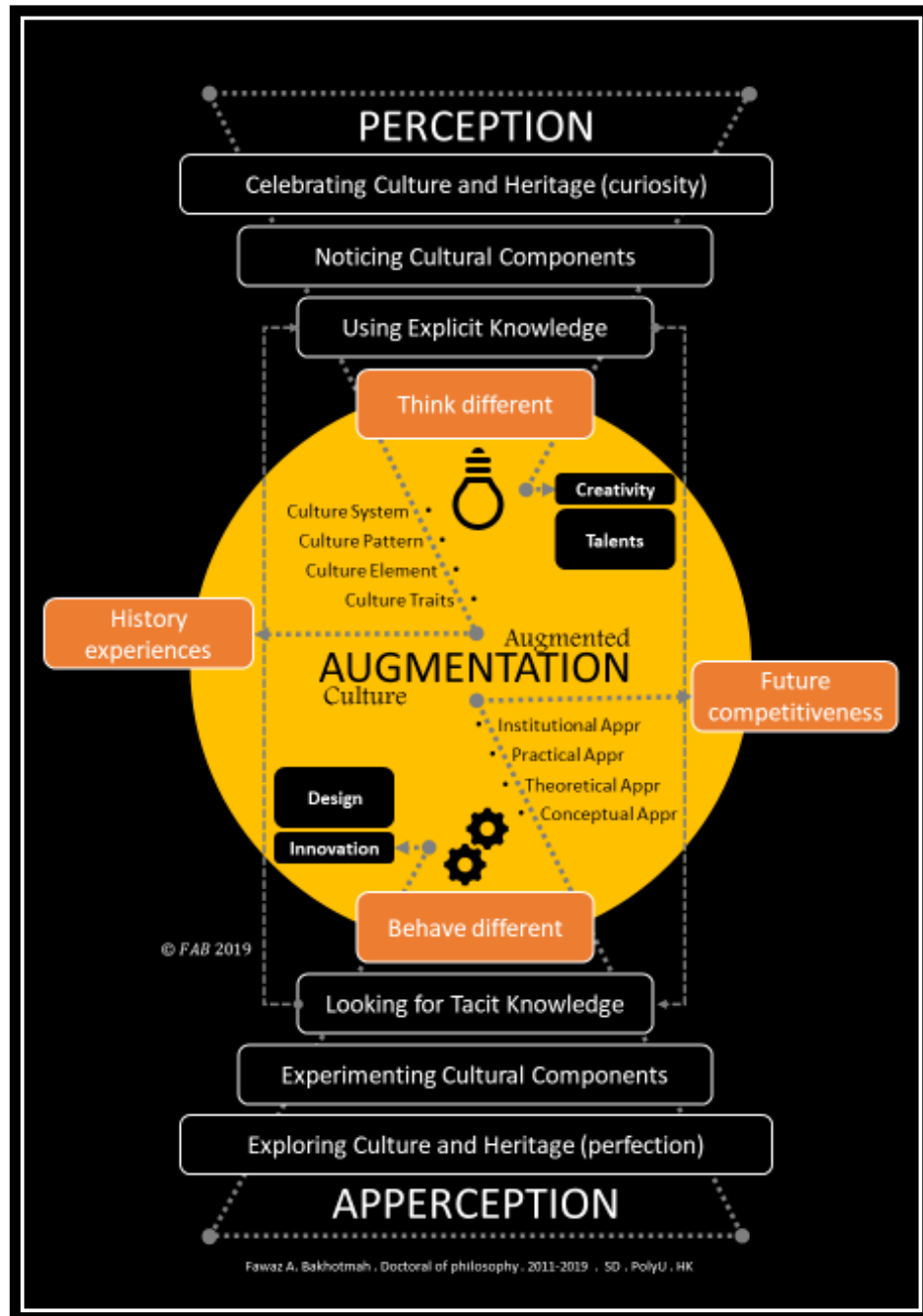


Figure 10.1, Culture Paradigm Shift Model (CPSM) is an interaction model for Human-based investment through “the perception of culture”, “the apperception of culture” and “the augmentation of culture”. Concept by author. Fawaz A. Bakhomah.

10.1.1.1. The Culture Perception

Culture Perception is a concept that constitutes the top part of the (CPSM) and works on using cultural and heritage resources, such as values, customs, events, etc., as a content that enhances the communication of societies with their civilizational and cultural origins, which we have called

in the model "Celebrating Culture and Heritage". In general, it is a curiosity-based approach as it is a means that attempts to highlight history, civilization, culture and heritage through explicit knowledge that contains: 1) elements of religion and values, 2) rule of prophets and inspired people, 3) law and society organization, 4) body of knowledge in terms of civilization and urbanism through history.

Therefore, we explained in the first chapter that the apparent sources of culture and heritage above cannot be elevated and useful without reflection and observation that make the society, including individuals and institutions, capable of building bridges of communication between them and the knowledge and economies of their society throughout history. Furthermore, we explained how many recent approaches based on researches, studies, theories and training programs have become creating new models based on exemplary relationships between culture and the world of commerce and business on one hand, and between the areas of design and creative works on the other hand. We also explained that culture supports design because design is a culture of creative work, a culture of creative thinking, and a culture of democratic dialogue, practiced by individuals or groups within all disciplines, giving it an added value.

This intellectual momentum about Culture Perception will make the decision makers able to generate creative intellectual models about culture and heritage, and they will also be able to explore the multiple intellectual talents in this field, allowing cultural revolutionary ideas to rise and participate, which we have called in the model "Think Different". However, here a question arises, is cultural explicit knowledge sufficient to make culture and heritage among the national development elements that are capable of generating innovators and designers, who are able to come up with revolutionary ideas that can be applied in the areas of services and products compatible with the era of advanced knowledge and technology? The study proved that explicit knowledge is not sufficient to achieve this, so I suggested exploring culture and heritage through tacit knowledge, which is the second concept in the (CPSM) model.

10.1.1.2. The Culture Apperception

Culture Apperception is the second concept that constitutes the lower part of the (CPSM) model as it establishes a deeper concept of culture and heritage and a more comprehensive knowledge of them that depends on tacit knowledge. In other words, we need an in-depth philosophical thought in the field of culture and heritage that enhances the orientation towards culture-based innovation in all fields, especially in the field of design and production, which we have called in the model "Exploring Culture and Heritage" instead of "Celebrating Culture and Heritage", along with dealing with them in terms of (perfection) and not only (curiosity). From this standpoint, the study devoted the fourth chapter to carefully examine the philosophies of three scholars whose intellectual outputs about culture are outstanding! They are not only among the intellectuals interested in the issues of civilization and culture and its multiple interactions, but they are also inspiring scholars for creative people, innovators and designers who want to use culture as a sustainable source of creativity, innovation and design. We do not exaggerate if we say that all theses of those three scholars are full of creativity, imagination, and practical motivation towards forming a philosophy that combines the experiences of the past with the capabilities of the present and the future.

We review below the three levels that have been concluded from the philosophy of those intellectuals, where we include them in a model called Culture Apperception Criteria (CAC). This model consists of twelve pillars divided into three groups. The first group contains six exploratory pillars to form a new cultural knowledge that integrates with the knowledge presented in the previous (CPC) model through the following: 1) Exploring the tacit knowledge of religion and values and not being satisfied with explicit knowledge (ad-Dīn), 2) Exploring history and highlighting its various cognitive and practical experiences and their patterns of development throughout history (at-Tārīkh), 3) Exploring the philosophy of products and services related to culture and heritage (aṣ-ṣanā'i), 4) Exploring the methodologies of teaching and learning in the civilizations (al-'ilm), 5) Exploring architecture and urbanism in the context of ancient and modern

societies (*al-'umrān*), 6) Exploring the value of the cultural accumulation of society life throughout history (*al-ḥaḍāra*).

The second group contains three cognitive pillars to analyze what is mentioned in the exploratory pillars above. These cognitive pillars are: 7) The abstraction of the general concept about which information was gathered or defining the new cultural knowledge that has been gained, 8) Choosing the most appropriate cultural approach to activate what was abstracted or defined in the previous step, 9) Making the cultural or heritage model as a product, theory, benefit or an experience that can be useful for development.

The third group contains three practical pillars that promote the transition from the cultural and heritage theoretical discussion to practical application through the following: 10) An approach that prioritizes material outputs, which we have called "realm of things", or 11) An approach that prioritizes mental outputs, which we have called "realm of thinking", 12) An approach that prioritizes management and organizational leadership, which we have called "realm of persons".

I stress here that we cannot separate these requirements from each other and overlapping will still exist. But undoubtedly, the important behavior and characteristics that all who work to achieve these requirements may have are the passion and ability to explore, develop and change, which we have called in the model "Experimenting Cultural Components". The people who have such behavior and characteristics are often classified in the category of those who are interested in the practical aspects of innovation and design. Therefore, we use the term "Behave different" to refer to them. It is important to seriously strive to generate them to be an essential asset whose role is to brainstorm the ideas of creative and talented people. Without them, society neither can be activated towards a knowledge-based economy, nor can we build multiple material production lines, no matter how far the ideas reach. Here lies the importance of the third concept in the (CPSM) model, which is augmentation of culture.

10.1.1.3. The Augmented Culture

Augmented Culture is the third concept that constitutes the central part of the (CPSM) model as it promotes coming up with mechanisms to integrate and activate the cultural cognitive outputs (cultural perception) and cultural practical initiatives (cultural apperception), so that we are able to create a developmental intellectual net capable of promoting development decisions through raising the level of scientific and practical awareness towards culture and heritage. Therefore, the fifth chapter of this thesis discussed the importance of some data that are related to expanding the circle of benefiting from culture and heritage, which makes it full of "ideas" on one hand and "things" on the other hand. Both of them need continuous exploration. Among these data elements are the following:

- 1) Accurately identifying culture components as system, pattern, element and traits. Culture cannot be dealt with as a single block or with equal importance and priority. Therefore, it must be analyzed in order to understand the complex interconnection and interdependence of its components in each of the four entries of culture. We called this process "Culture Components".

- 2) Dealing with the four approaches of culture; institutional, practical, theoretical and conceptual. Each entry has its own philosophy through which new outputs based on innovation and design can be formed. We called the four cultural approaches that were concluded from the study's literatures, "Culture Approaches".

- 3) Emphasizing the importance of explicit and tacit knowledge. Describing or imitating something, for example, may require nothing more than explicit knowledge. However, to explore or develop something, you need tacit knowledge. Therefore, both kinds of knowledge are indispensable in cognitive creativity, innovative behavior and interactive design when dealing with culture-based innovation.

We must enhance knowledge about these three data elements and make them among the basics of dealing with culture and heritage as mechanisms for development. However, it is difficult for the human mind to grasp them because of their large content. Therefore, the study suggested a model

called "Augmented Culture Net (ACN)" that was defined in the study methodology under the topic (Knowledge Net). As a result, it was important to develop the idea of this net to be a means that promotes collecting in-depth data and information on cultural and heritage issues even if the resources are limited. Therefore, we called it "Augmented Culture". Since visualizing this net in the central part of the (CPSM) model is important, it was put into a separate model and considered as the second model for the outputs of this study under the name of "Culture Artificial Intelligence Net (CAIN)".

10.1.2. Culture Artificial Intelligence Net (CAIN)

This net is an illustration of the central part of the Culture Paradigm Shift Model (CPSM), which helps to find various material and moral outputs based on culture and heritage. The net is able to deal with both explicit and tacit knowledge, in addition to its ability to dealing with past experiences and present issues and foreseeing the future. (see Figure 10.2), the net can be activated through five stages:

The first stage: identifying the topic of the cultural or heritage issue that needs further discussion or exploration. In order for the issues not to be out of control, they have been restricted to four areas in the four pillars of the model, which are: cultural knowledge, cultural components, cultural entrepreneurial and cultural investments.

The second stage: thinking about bringing the issue's information through explicit and tacit knowledge, which has already been reviewed in the terms perception and apperception.

The third stage: the use of specialized terms. These terms will increase the breadth of thinking and deepen knowledge about the issue. These terms are endless and are limited to the four pillars of the issue's content being discussed, which we explained in the first stage.

The fourth stage: the smart questions. In this stage, deep questions are asked about the issue, for which the knowledge net was created. The net will contain more knowledge and will be more productive when the questions are varied

and include the past, present and future on one hand, and issues related to perception and apperception on the other hand.

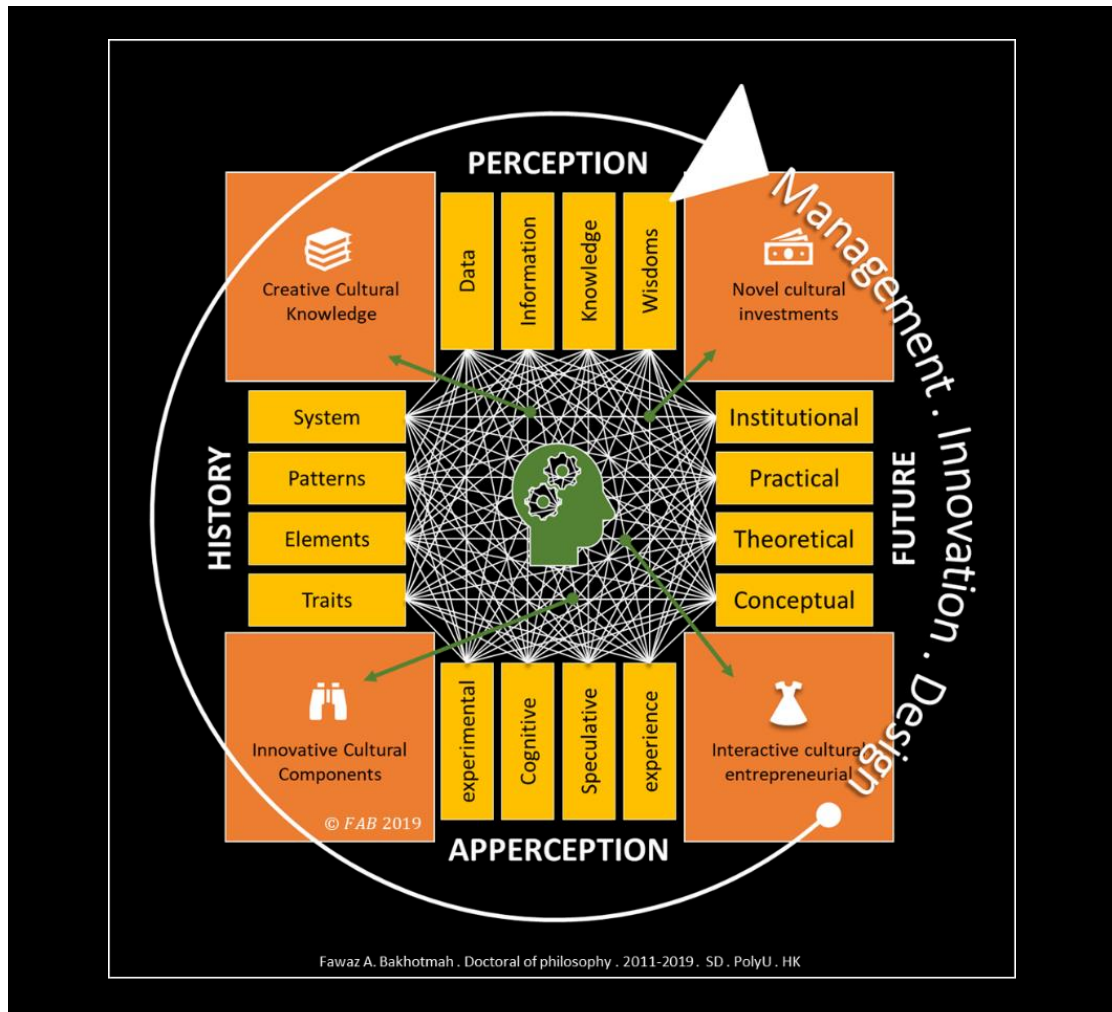


Figure 10.2, Culture Artificial Intelligence Net (CAIN) is working to establish an intelligent cultural knowledge network which interacts between the Culture Paradigm Shift Model (CPSM) and the Culture Bee Innovation Model (CBIM). This interaction on the one hand weaves its culture and heritage from Perception-Apperception and from a history-future on the other. Concept by author. Fawaz A. Bakhotmah.

The fifth and final stage: the augmented culture stage, through which present or future issues are imagined through the data, information, and reasons that have been found. The researcher used this net to study four assumptions, which are the following: Institutional cultural approach motivates culture systems, practical cultural approach highlights culture patterns, theoretical cultural approach revives culture elements and conceptual cultural approach contemplates culture.

The aim of these assumptions is to explain the abundance of cultural and heritage knowledge, its importance and degree of credibility, which makes us able to come up with a diverse range of ideas and produce a large amount of innovations that can be implemented.

10.1.3. Culture Bee Innovation Model (CBIM)

This model (CBIM) is the third model of the outputs of this study, and it is an attempt to imagine the mechanisms of forming what we called "augmented culture", which is the applied approach suggested by the study to be able to generate innovations, designs, and services. Augmented culture and heritage cannot be reached without understanding the two previous models and the importance of interaction between "explicit culture perception" and "tacit culture apperception" on one hand, and activating the role of experiences and competitiveness of designers, craftsmen, talented people, and entrepreneurs on the other hand.

In other words, the model (CBIM) is similar to the bee life cycle in absorbing the nectar of flowers and turning it into a multi-flavored honey. Undoubtedly, the bee life cycle is an innate and inspiring one that can be utilized in renewing knowledge data and generating innovative mechanisms for its sustainability, especially if the matter is related to the multiplicity of knowledge sources and the diversity of their levels, as well as to history, present, and future. In order to turn the bee life cycle into a practical reality that benefits us, we need to focus on six main topics covered by the (CBIM) model. These topics are:

1) Promoting cultural and heritage initiatives whether celebrations or festivals with competencies that are capable of carrying out different thinking processes that result in a detailed and structured creative knowledge base, and this is what might be called "Culture Curiosity Platform".

2) Activating the creative knowledge of the previous step by stimulating those who have practical behavior based on experience, exploration, and production by using them within the mechanisms of their thinking in generating innovations and design, and this can be called "Culture Perfection Platform".

3) Sustainable work to expand the relationship between the two previous steps (perception/apperception) through the use of the (CAIN) model, and this is what we called "Augmented culture".

4) making sure that the success of the three previous steps is not isolated from knowing the patterns of culture and heritage throughout history, and this is what we called "culture components", nor is it isolated from the future directions of culture and heritage, which we called "culture approaches".

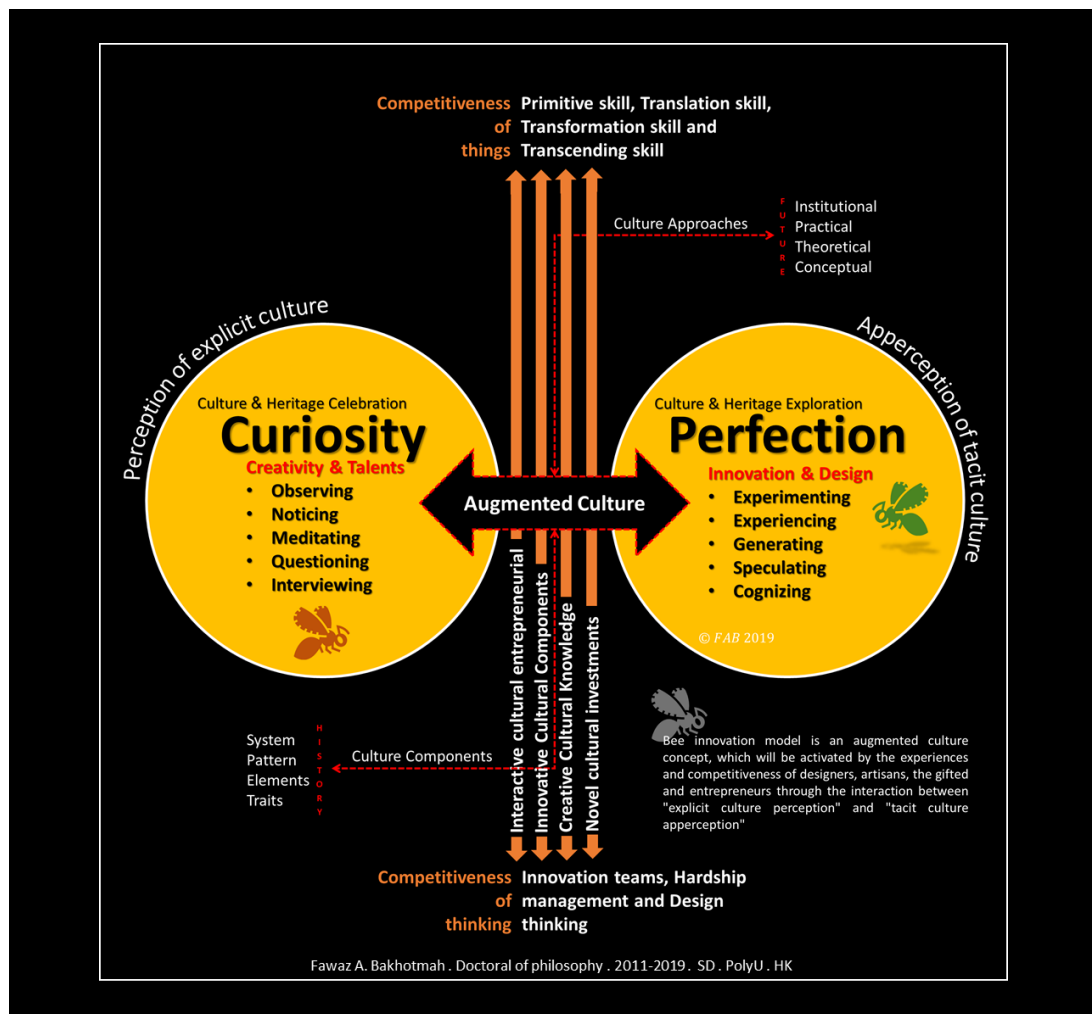


Figure 10.3, Culture Bee Innovation Model (CBIM) is working to transform the Human-based investment of the Culture Paradigm Shift Model (CPSM) by focusing on six main topics: 1) to gradually move from celebration to innovation; 2) to graduate specialized competencies and leaders in culture; 3) to give the priorities for cultural productive projects; 4) to establish an enthusiastic management for competitiveness; 5) to generate a variety of outputs of products, services, and theories through Translation, Transformation or Transcending thoughts and 6) to keep the cycle of this model sustainable. Concept by author. Fawaz A. Bakhomah.

5) The constructive integration of the four previous topics will generate two approaches that are considered one of the most important development data that help to make culture and heritage among the directions of national development that are indispensable for the society's knowledge and productive renaissance. These two approaches are "Competitiveness of Thinking" and Competitiveness of Things". Therefore, when decision makers can lead institutions and society to reach these two levels, it will be easy to find new development axes capable of creating innovative educational methodologies and innovative economic production lines.

6) Through the two previous approaches, culture and heritage can be dealt with through the four approaches mentioned previously in (CAIN), which are: Cultural Knowledge, Cultural Components, Cultural Entrepreneurial, and Cultural Investments.

10.2. Future Framework of Models

All the models presented in this thesis are the result of an intellectual interaction between all the information gathered and dealt with through the methodology adopted for this thesis, which was explained in detail in the third chapter. It is important to remember that we have made clear in the topic of "knowledge gap addressed" that the most important goal for the researcher is that the methodology of this thesis should be based on providing new information that helps bridge some of the knowledge gap in the way to forming thinkers in the field of design and innovation based on culture and heritage to be development decision-makers. Therefore, we have made clear that there are two things those interested in this field need to have: first of all, to have the ability to deal with multiple intellectual axes, which help to observe, reflect, and explore values, customs, and traditions within religions and civilizations, and to have the ability to deal with other intellectual axes that explain how to benefit from the experiences of cultural societies throughout history and the most important factors of contemporary intellectual and productive progress on which they are based.

Based on this principle, we made clear in the "study limitation" topic that the final outputs of this thesis as a first stage will be within "development models" that achieve the study goals. Therefore, the researcher explained directly after

obtaining the approval of the academic supervisor that setting executive policies or restructuring, setting design scenarios or urban plans, or developing a cultural or heritage product whether it is material or service are not among the thesis outputs. All these and similar matters are a future stage that can be achieved if the decision-maker wishes to activate this thesis and transform it from its philosophical scientific vision into a practical operational vision that is part of a large national project that has its financial budget and national and international cadres.

From this standpoint, and for benefiting at the scientific and practical levels from the thesis' knowledge in general, and from the thesis' models of development in particular, the researcher suggests that institutions, researchers, and students try to use these knowledge and models, taking into account the principle of cooperation and participation in developing the field of culture-based innovation in both its developmental and productive aspects, as there is no final work and everything is subject to discussion and development. Therefore, the researcher suggests using the models of the thesis within the following five frameworks:

10.2.1. First Framework

Using the models to activate the role of creative and talented people on one hand, and prepare a generation of innovative and design competencies on the other hand to be the future competencies who have the ability to invest the historical, civilizational, cultural, and heritage status of the Kingdom of Saudi Arabia whose importance is increasing through the age of knowledge, which is rich in terms of the large amount of information and the increasing artificial intelligence. These two things will represent a motivation to highlight creativity in cultural and heritage knowledge and explore the talents that lie in the power of observation and multiple patterns of thinking about culture and heritage. Consequently, we will be able to generate various development models that link between originality and contemporaneity, and this will help in finding new approaches for diversifying economy, long-term investing in cultural projects of great competitiveness, and establishing a structure of high-quality cultural services that commensurate with the knowledge-based society and economy.

10.2.2. The Second Framework:

Using the models as an added value in developmentally enhancing the role of celebrations, festivals, and initiatives, and this goal cannot be achieved without activating the role of the competent people capable of creative thinking; as they are the only ones capable of building a specialized information base that can gradually transform these festivals and initiatives from the traditional thought, such as the celebrations and selling heritage products (culture curiosity platform), into the developmental thought of modern societies which is based on innovation and design (culture perfection platform). Through this mechanism, there will be direct and indirect stimulation of society to acquire new behavior based on thinking and production rather than just buying and consumption.

10.2.3. The Third Framework:

Using the models to create educational programs, intellectual seminars, philosophical theses, and design projects within public education institutions or universities to motivate students or trainees to participate in the attempt of making culture and heritage among the development strategies of the country. Continuing and pursuing this approach will create a segment of society who has passion for dealing with their culture and heritage, not only as a national and emotional belonging, but also as competitive tools, both scientifically and practically, and this is what the interviewed Saudi intellectuals unanimously explained. One of the most important promising results in this regard may be the ability to develop constructive scenarios for providing competitive products and services and finding new productive theories about culture and heritage.

10.2.4. The Fourth Framework:

Using the models in creating cultural knowledge, innovating cultural components, encouraging cultural investment, and generating cultural entrepreneurship. These four priorities are not limited to Al-Janadriyah Festival, but they must include the similar initiatives in Saudi Arabia and other countries as well.

10.2.5. The Fifth Framework:

Using the models in building intelligent software programs for culture and heritage, which strengthen perception and apperception on one hand, and

history and future on the other hand. It is a long-term development that should extend to all government and private institutions and interact with the communities' daily life in order to generate four skill levels; primitive, translation, transformation, and transcending.

Chapter Eleven

Study Conclusion and Recommendations

- 11.1. Study Conclusion
 - 11.1.1. Development Vulnerabilities Challenge
 - 11.1.2. Fulfill Study Goals
 - 11.1.3. Fulfill Study Objectives
 - 11.1.4. Apperception Enhance cultural thinking & Things
 - 11.1.5. Augmentation Encourage Cultural Intelligence
 - 11.1.6. Scenarios Create Opportunities for the Future of Culture
- 11.2. Study Recommendations

11.1. Study Conclusion

This thesis aims to develop the competency of creativity, innovation and design through the reflection of the cultures of societies in general, and particularly the cultures of societies based on the values of Islam and Arabic origin. Unfortunately, innovation and design have been frozen in the Islamic and Arab countries since the end of the golden age²²⁴, which can only be described as a deep intellectual fallacy. As a result of this hibernation, the Islamic and Arabic nations have experienced a cultural dependency²²⁵ or a cultural suicide²²⁶ after enjoying many ages at the center of culture, civilization and progress in the world, a fact that has been witnessed by the fair scholars and philosophers of the West and the East. Through this thesis, the researcher wants to prove the nation's urgent need to create a Muslim Arab thinker who is generally interested in innovation and design., specifically innovation and design based on culture and heritage, through awing inspiration from the civilized and competitive dialogue among the nations of the developed world. This conclusion intends to portray that this thesis has fulfilled the following issues:

11.1.1. Development Vulnerabilities Challenge

In the second chapter of this thesis, four development issues of Saudi Arabia were discussed, which were met by four questions that intrigue finding positive perceptions on these issues. One of the perceptions reached is that the Saudi Arabia needs to build creative development models in all four issues; however, the most important one according to the researcher is related to its culture and heritage, due to three reasons: 1) Culture and heritage are the two most

224 "A golden age of discovery flourished from the seventh century until the sixteenth century. During this period in the Muslim world, scholars of various faiths and cultures built and improved upon the knowledge of ancient Egypt, ancient Mesopotamia, Persia, China, India, and of the Greeks and Romans, making breakthroughs that helped pave the way for the European Renaissance. Great men and women of the past-mathematicians, astronomers, chemists, physicians, architects, engineers, economists, sociologists, artists, artisans, historians, geographers, and educators expressed their faith by making beneficial contributions to society and humanity. They did so with open-mindedness and, in many instances, in collaboration with people of other faiths, cultures, and backgrounds." (S. T. Al-Hassani 2012 , 19)

225 "civilization dependency" (تبعية حضارية) a term coined by Dr. Taha Al-Alwani for those who follow the Western civilization/culture leaving behind their beliefs, values and their personalities, thus making them dependent on the civilizations/cultures of others. (Al-Alwani 1994, 17-18)

226 "civilization suicide" (انتحار حضاري) a term coined by Dr. Taha Al-Alwani for those who believe that the world is multi-civilizations/cultures but independent and isolated among themselves. (Al-Alwani 1994, 17-18)

important national factors that guide generations towards pride in their identity and drive them towards a passion for knowledge and practical success. 2) Culture and heritage have a great impact on the success or failure of many initiatives that have to do with money and business on the one hand, and innovation and design, on the other hand, and both of them are highly related to activating the economy and knowledge society, and we have mentioned some examples in this regard. 3) We demonstrated by observation and analysis in the first chapter that culture and heritage can generate many ideas and we reviewed some realistic examples in this regard.

Among the most important achievements of this thesis is choosing literature that centered on the importance of culture and heritage as development mechanisms that help innovation and design. This point was inferred through intellectuals who discussed this approach in the past and recently, namely (Ibn-Khaldun), (Malik Bin-Nabi) and (Paul Schafer). The thesis also reviewed the developmental orientation of China by enhancing its culture and heritage to be inputs to its innovation-based development. Moreover, we reviewed a new economic theory that pushes development decision makers to invest the resources and opportunities available in their countries in a manner that is commensurate with the capabilities of their peoples, cultures and heritage. Based on these concepts and other field studies, all models mentioned in this thesis, specifically the last three models in Chapter 10 are a catalyst to address development issues through changing our way of dealing with culture and heritage from being a curiosity approach to being a perfection approach. This was confirmed by surveying the Saudi society's views on culture and innovation, and whether they agree with the researcher in the importance of developing the National Festival for Heritage and Culture to be a national development project for innovation and design based on culture and heritage. The results were as follows:

The first category, a meeting with five intellectuals, all of whom have a high level of education; national culture; knowledge of local, regional and global affairs; and their development and intellectual philosophy developed throughout their experience in decision-making in their field of specialization. There is a consensus among this category that the innovation in Saudi Arabia is not as

expected and the same applies to the strategy of the knowledge-based economy. This is consistent with the researcher's conclusions on the four issues of the thesis. There is also a consensus among the intellectuals that culture and heritage are an essential pillar in global development, progress and competitiveness. Therefore, they see that SAUDI ARABIA should be building a development model in the making of its civilization through the religion, culture and heritage it possesses, as it is the correct "track" for global competition. The Arabian Peninsula possesses "treasures" of cultural diversity at the religious, historical, civilizational and urban levels. The intellectuals also indicate that the Islamic religion and the Arab Islamic culture are ready in the awareness of Saudi society and only need a smart start! They believe that development decision makers may not have quality and urgent ideas on this aspect, which may be offered by topics such as those presented in this thesis. Intellectuals also see that Saudi Arabia has become culturally aware at multiple levels, but most of this awareness remains through festivals, celebrations and events, which should change to projects that foster creativity, innovation and design on the one hand, and add diversity in the fields of education and economics on the other. When talking about the obstacles that hinder investment in cultural and heritage knowledge, the main obstacle was that the knowledge-based economy needs strong initiatives, including the promotion of this type of cultural investment that must be managed by society and the private sector and supported and encouraged by the government transparently, and under a system of Islamic values and Arab originality.

The second category, a surveying opinion through a limited questionnaire regarding supporting innovation and design in Saudi Arabia through developing the Saudi National Festival for Heritage and Culture to become a national development project based on innovation and design. There is almost a consensus among those surveyed that culture and heritage should be linked to national development, and that it is time to develop ideas about the festival to be the nucleus of a development project based on creativity, innovation, invention and design in the field of culture and heritage. The festival should be run with a design thinking methodology, and it should benefit from the festival's guest countries in building bridges of cooperation between them and Saudi

Arabia to exchange experiences and products know-how. In general, the segments of society understand that innovation and design have become an extremely important development issue, and that culture and heritage are a fertile field for this development, which is consistent with the issue of this study, where the thesis' proposed models will be a strong motivation towards finding a positive qualitative shift regarding the four issues of this study.

11.1.2. fulfill Study Goals

its study goals, the first and primary being the aim of shifting Saudi Arabia's current interest in its culture and heritage, to evolve from a culture-centric interest "cultural leap" to culture-centric knowledge creation, innovation power and productive capacity that is inclined to pave a clear path of economic diversification in Saudi Arabia's "cultural renaissance". This goal is interpreted through three chapters; namely chapter nine where we delved into the concept of culture - based innovation, which supports the notion of culture as the foundation of innovative and creative thinking.

The second study goal fulfilled in this thesis, is the concept of activating the foundation of culture from *ad-Dīn*²²⁷, *at-Tārīkh*²²⁸, *aṣ-ṣanā'i*²²⁹, *al-'ilm*²³⁰, *al-ḥaḍara*²³¹, and *al-'umrān*²³² and transforming it into a source of sustainable knowledge input that results in innovation and creative outputs that consider the requirements of the times, the glory, the authenticity and significantly the identity of the Arabian Peninsula. A concept that was interpreted in Chapter four, where "The apperception of culture" was introduced and discussed at length.

The third study goal fulfilled is that of knowing that creativity, innovation and design are not only shaped in the realm of things, but that they are also implemented in the realm of people and the realm of ideas to develop, improve upon them and sustain them. Fundamentally, the concepts and priorities of

²²⁷ Religion

²²⁸ History

²²⁹ Crafts

²³⁰ Science

²³¹ *al-ḥaḍara*; read more about it at chapter (4) topic (4.1.5)

²³² *al-'umrān*; read more about it at chapter (4) topic (4.1.6)

each culture must be defined around these three worlds, based on political, economic, scientific and social conditions. This notion was interpreted in chapter six's "Observation culture".

The fourth and final study goal fulfilled proves that culture as a methodology of innovation and design cannot be confined to, nor limited to narrow intellectual visions or specific scientific or social disciplines. However, the power of culture can be sought as a methodology of innovation through the knowledge of its elements, its approaches, its specialties and its historical association with the pasts, the present and the future; a concept inspired by Ibn Khaldun's philosophy of the activation of history in its three dimensions, past, present and future. This final study goal was interpreted and discussed in two chapters, chapter one where we introduced the "Perception of Culture" as well as chapter five, where we lengthily discussed the "Augmentation of culture".

11.1.3. Fulfill Study Objectives

Additionally, to the four study goals, this conclusion also aims to prove that this thesis has fulfilled its study objectives. The fundamental aim or crux of this thesis is that religion is the foundation and the center of culture, it is not separate from the world as we know it. The researcher specifically spoke of Islam as the religion this thesis is centered around, as the main focus was to hypothesize the redirection of Saudi Arabia's festival and tourism programs.

Since the researcher's aim is to inspire Saudi Arabia's present and future generations regarding innovation, creative thinking and design, moreover, bringing about the knowledge that these are things that are not separate from religion and culture. The researcher aims to inform the reader about the religion of Islam, as one that is at the core of every single Muslim in the world; he beautifully paints a picture in chapter six when he writes that even during Saudi Arabia's national festival, as soon as there is a call for prayer, every Muslim person without intervention from the clergy voluntarily responds to the call of prayer and goes to an area to pray.

Throughout this thesis, there has been one message regarding Islam and that is the Quran is its most important source, not only a religious source, but a source of cultural awareness, which is reflected in the perception of life. Islam

was brought to the world through the holy prophet Mohammed PBUH, whose teachings are applicable in all areas of life, they are a source of learning, a source of learning a certain mindset, a source learning certain behavior and these are teachings that Muslims honor as they are from one of the best human beings to have walked the earth.

Moreover, the concept of worshipping God is one of the objectives that expands into science and work, this was beautifully explained in chapter six, where the researcher delved into the science of the Halal food industry. The worship of God is not only religious, but it also transcends into science and work, a point that was also brought across when the researcher wrote that Islam is not only a religious creed, but it is also a system of daily life rich in value and ethics and is a catalyst for progress and prosperity. Religion for Muslims is not separate from the world, nor is it separate from heritage and progress, in essence when it is seen as a foundation of all of these then they all become models of cultural excellence such as the example of the Halal food industry.

The researcher further entrenches the point that Islam encourages innovation, creative thinking and design when he quotes the philosophical culture concept by Ibn Rushd, which encourages the understanding of reality by thinking, analyzing, devising, imagining, contemplating, extrapolation and reasoning and furthermore the acknowledgment that criticism does not conflict with the realization of reality in religion.

To re-iterate the beginning of this conclusion, where we spoke of a generation that is born into a state of cultural dependency being a generation that is doomed to mimic other cultures, this once again highlights the central role religion plays in the world, because Islam discourages imitation, to quote Imam Ibn al-Jawzi who says; “imitating the non-believer in his or her imitation, and in following the actions of imitating heroes, is only created for reflection, but remains ugly for those who gave a candle to light to provide light so that nobody walks in darkness”. These words further reinforce the opening paragraph of this conclusion, as they not only highlight the perils of cultural dependency, but they also highlight that without religion as a guide many would walk in darkness.

Pertaining to Saudi Arabia's National Festival, this thesis has highlighted the crucial need for new and innovative mindsets so as to evolve this festival. This type of evolution is primarily dependent on creative thinking, which transforms into innovation and design. The concept of learning from the cradle to the grave is mentioned earlier on in this thesis, this concept is one that is synonymous with the mindset the researcher speaks of, moreover this mindset is a significant part of the Arab world and Islamic civilization when we think about this nation's Golden era, which was Islam's intellectual and productive era. The words; "learning from the cradle to the grave" symbolize the continuous learning cycle of this nation, when one generation of thinkers and innovators dies, another one is certainly destined to take over and either evolve the concepts of the previous generation or innovate new ones. The researcher has provided multiple examples where religion and culture have synchronized with innovation, he mentions the invention of a machine to wash feet without raising them to the sink, the washing of feet is a necessity for Muslims before prayer, however the sick and the elderly would normally have to raise their feet to the sink to complete this task. This invention meant that the elderly and the sick are able to wash their feet without having to either uncomfortably and painfully raise their feet to the sink or buy lower taps. This is a prime example of culture and religion linking to the "the realm of things", namely projects.

11.1.4. Apperception Enhances Cultural Thinking & Things

This thesis is based on an important principle in its implementation, which is how do we think first? Then how do we accomplish its goals? In terms of how we think! The researcher relied on three important intellectual levels that he quoted from Ibn-Khaldun, namely:

1) The man's intellectual, which is the intellectual level that corresponds to the term (perception). The most important source of information the researcher relied on for this level is the explicit knowledge. This method is called inductive method and was used in the most literary readings of this study. It was also used in reading SAUDI ARABIA's nine development plans, its 2030 vision, its 2020 transformational program and many strategies, the most important of which is a knowledge-based economy strategy, in order to explore the aspects of the four development issues as mentioned previously. We derived from this methodology a model we

called Culture Perception Criteria (CPC) to be among the components of the final study model that we called Culture Paradigm Shift Model (CPSM).

2) The experimental intellect, which is the intellectual level that corresponds to the term (appreciation). The most important source of information the researcher relied on for this level is (the tacit knowledge) and this method was called the (deductive method) and was used in analyzing the twenty-seven projects mentioned in the first chapter of this thesis. This method was supported with literature by three intellectuals from different time eras as discussed in Chapter Four. We have derived from this methodology a model we called Culture apperception Criteria (CPC) to be also among the components of the final study model that we called Culture Paradigm Shift Model (CPSM).

3) The speculative intellect, which is the intellectual level that corresponds to the term (augmentation), which is the process of intellectual merging of the two methodologies (perception & apperception). The most important information source for them is (the explicit & tacit knowledge) and this method is called (inductive & deductive method). It is a suggested method that fits with the model that we called Augmented Culture Net (ACN), which was developed by the end of the study to become Culture Artificial Intelligence Net (CAIN). We mentioned earlier that this model deals with the perceptual and application level of culture and heritage, which generates outputs that are at the level of material products, services, scientific theories, entrepreneurship and promising investments.

These three intellectual levels mentioned above are a logical gradation from simple and traditional thought into complex and interactive thought. It should be noted that these three levels of thought are not separated as they work together according to people's capacity of cognitive comprehension and the ability of interactive thinking. In other words, these intellectual levels depend on the level of thought of the decision makers who deal with culture and heritage on the one hand, and on the level of skills anticipated to be generated to be inspiring when using and investing culture and heritage, and they are, as we explained in the thesis, on four levels: 1) Primitive Skills, 2) Translation Skills, 3) Transformation Skills, and 4) Transcending Skills. It is important to note that these three levels of thought had to be augmented with some methodologies, including: 1) The

field studies methodology to explore the components of culture and its entry points. 2) Knowledge net methodology to generate more knowledge. 3) Scenario methodology to highlight the diverse and future visions of culture and heritage, for those who are still ignorant of the possibilities of innovation and design in the areas of daily life and their ability to create a competitive productive development environment. 4) The methodology of interviewing Saudi intellectuals to explore their level of contentment and conviction in activating Saudi culture and heritage as a catalyst for innovation and design and not as celebrations and marketing within traditional patterns. 5) The survey methodology to explore the extent of society's awareness of the idea of upgrading culture and heritage to be a development model based on innovation, design and production.

Accordingly, we can assert that it is impossible to make culture and heritage a vital material for development and advancement and to make them an added value within the fields of thinking and production without understanding the interdisciplinary dimensions of knowledge, which can be addressed by the term apperception since it is more inspiring for the future of innovation and design that are based on culture and heritage, because it is compatible with big data and the complexities of intellectual concepts on them, which the term perception cannot contain or include within the big data platforms in order to be the beginning of the formation of promising interactive platforms we called the cultural augmented reality.

11.1.5. Augmentation Encourages the Artificial Intelligence in Culture

In the sixth chapter of the thesis, we discussed four study cases resulting from four cultural hypotheses that were discussed in Chapter Five. Study cases can be summarized as follows:

1) Understanding culture as a system by fostering innovation and design in Hong Kong. This study proves through the cultural institutional approach that Hong Kong is working in harmony for the development of the city towards achieving its civilized goals through its culture and heritage. This indicates that its decision-makers maintain its sustainability by the approach that gives it its common identity between East and West. This means that the state and its institutions are always eager to choose persistent and creative leaders who are able to understand the urban systems and the cultural and heritage requirements of society. They also

have a qualitative intellectual depth in translating these feelings into a base of social ideas and investment diversity, which enhances the communication among institutions and with the society. This undoubtedly indicates creativity, innovation and culture-based design that the Hong Kong government has established for itself through professional institutions and associations, including the Hong Kong Design Center, where, for example, this governmental association called for 2012 to be the year of Design for Hong Kong, where more than 2 million participated in this initiative, through which the government and private institutions showed their creativity, design and innovation for the city and Hong Kong residents. Here we conclude that the activation of culture as a system and the possibility of converting it into products and services, is highly dependent on the state's vision and constructive thinking towards its construction, and this is more or less what Ibn Khaldoun said six hundred years ago. Therefore, we can prove that the state and its institutions are largely responsible for the success of culture as a system and linking it to the market of design and innovation²³³.

2) Understanding culture as patterns by understanding the Muslim Chinese's trading of their halal foods within their old neighborhood in Xi'an, China. This study proves through the cultural practical approach that the Muslim Chinese have a realistic Islamic vision that demonstrates that the Islamic religion, with its flexible interactive culture, and its cultural interferences produced throughout history, is capable of finding smart and sustainable social solutions that are appropriate for every time and place. When settled in China nearly a thousand and three hundred years ago, the nucleus of the first Chinese Islamic society did not confine to itself or refused to adapt to the Chinese culture in which it was nurtured, but has proven over the centuries that it is an essential part of the history of China and that it is also a component of its civilizational and cultural system. The Muslim Chinese community in Xi'an - the ancient capital of China - clearly

What is happening in Hong Kong in terms of street demonstrations and sit-ins that started in 2014 and²³³ culminated in riots and sabotage of public property and some universities in 2019 is due to political matters based on the belief of the people of Hong Kong, especially the younger generation of them, that the Chinese government wants to keep its guardianship over some Hong Kong laws that undermine their freedoms and reduce the democracy of electing their leaders, which was the case since the return of Hong Kong to China in 1997 through the British occupier. Therefore, we should not confuse civilizational and cultural progress and knowledge-based development excellently adopted by the Hong Kong government and shared positively with its peaceful and educated people with the fear of its people from ill-conceived political trends.

reflects that the Islamic religious and cultural dimension has lived in China with enlightened, creative and innovative thought and it continues its human benevolence to the present day despite the persecution and racism that the Muslim Chinese experienced at the hands of some Chinese governments throughout history. History has not recorded any destructive thought by Muslim Chinese to undermine the Chinese progress and civilization. Rather, their thought was a participatory and constructive thought that reflects many meanings of the philosophy of development and sustainability in its most prestigious meanings. Therefore, we can say after this study that there is a great correlation between development and knowledge of cultural patterns through the cultural practical approach, as this methodology proves that society can activate itself with its cultural and heritage possibilities and opportunities, and can even be effective in the economic development through the ideas it possesses, which are capable of generating new innovative works. The one thing that many may not know is that the most important catalyst that pushes the people of this neighborhood to work hard and vigorously to prove the capabilities of their culture to excel is the mosque. Yes, the mosque is the one that brings them together to worship God, and it urges them at the same time to perfect work, serve the community, develop civilization on earth, communicate and compassion among each other's.

3) Understanding culture as elements through Chinese silk and specifically as traits through Kesi silk. This study proves through the educational cultural approach that the strategies of society and the knowledge economy drive towards human and economic development by thinking creatively and working with innovation, including the participation of universities in studying the most accurate components of culture and heritage in terms of “elements” and “traits” through creative intellectual channels and innovative research work. Hence comes the importance of the educational or theoretical cultural approach in identifying multiple means of educational ideas that help to activate culture and heritage to be among the requirements for promoting national development. The study was about reviving the Chinese silk craft called Kesi Silk by setting up a specialized scientific exhibition entitled "One Inch of Kesi Silk, One Ounce of Gold". The exhibition was based on academic, research and documentary efforts. The aim of this exhibition was to open up to society in order to find creative ideas that make this important Chinese cultural element sustainable within

the innovations and designs of interested students, professors, businessmen, etc. so as to make it one of the competitive Chinese brands that are keeping up with the current era, provided that the product maintains the needed manual, accurate and arduous skills of making. The exhibition contained four participations at the doctoral level and opened up the way for civil society to benefit and participate.

4) Exploring and activating "cultural components" through the Saudi National Festival for Heritage and Culture. The festival is held annually in the Saudi capital (Riyadh) for two weeks and attracts hundreds of thousands of visitors from inside and outside SAUDI ARABIA and dozens of intellectuals worldwide. The festival, as we explained in the rationale of this thesis, contains integrated cultural and heritage images that are difficult to find in another festival on the regional level. The festival brings together the culture and heritage of an entire country in one village since more than 30 years, so the potential of the festival is huge and its opportunities are promising if it was addressed with creative ideas, innovative behavior and design vision! Although the festival is held annually and grows steadily; however, this growth is without philosophical directions or strategic goals towards creativity, innovation and design. It is still a traditional national festival that is based on the use of culture and heritage from the perspective of preserving them and introducing people to them without investing them, supporting the national economy with them and creating a global and competitive productivity out of them!

Therefore, scenarios had to be used to clarify the multiple perspectives on the festival, and which is better for the future of Saudi national development in terms of making culture and heritage a philosophy of festivals and events, money and business or innovation, design and production! The researcher concluded that scenarios are the best example that can convey a message to decision makers about the importance of switching from traditional ideas to pioneering ideas, from exhibition to production, and from simple visions to competitive national visions! There are many festivals, events and projects that need to be reviewed, developed or upgraded to be generators of creativity, innovation and design. The greatest benefit that is drawn from these studies is that the expansion in observing and exploring issues of culture and heritage is not an easy thing, but rather it is a complex knowledge network with no boundaries, and it can be infinitely expanded, but the interesting thing is that the wider the

network becomes, the more stimuli we find for creativity, innovation and design. Exploring these stimuli depends heavily on the ability of the interested persons to devise, comprehend, create and imagine based on experience and the extent of acquaintance with the interrelationships between "ideas" and "things" and "persons". This step will not lead towards broader horizons and become more important and useful in the future if we do not think of integrating it with artificial intelligence. Therefore, the thesis proposed the (CAIN) model as a start that many cultural artificial intelligence programs could be developed around.

11.1.6. Scenarios Create Opportunities for the Future of Culture and Heritage

The thesis discussed three scenarios for the future of the Saudi National Festival for Heritage and Culture, namely:

1) A festive scenario, which is driven by harnessing originality to be a national element that highlight the interest of the state in its originality, through its history, civilization, identity, and reviving its diverse heritage in line with the requirements of the political establishment in promoting patriotism. We concluded that this scenario would lead to a stagnation of cognitive creativity, innovative behavior, and design thought, in addition to not taking advantage of the talents, capabilities, and competencies that already exist in Saudi society.

2) An economic scenario, which is driven by harnessing originality to benefit from it as economic data based on cultural, material, and moral elements that drive the feelings of society in order to achieve profitable economic revenues through trade, investment and tourism. We concluded that if this scenario was built on other than the goals and data of the knowledge economy it would be disastrous because the error in the economy of natural resources - even if it was not based on the knowledge economy - can be fixed due to the magnitude of the natural stock; however, any error in trading and building economic models based on civilized resources that include culture and heritage will be fatal and irreparable because these are historical and cultural components, and if they were commoditized or imitated we would lose them forever, this is on one hand. On the other hand, there will be no developmental movement that enhances the fields of creative thought, innovative behavior and exploration of national experiences, because the attention will then be focused on the

trade of ancient elements, which will attract cheap labor to imitate and gain from them.

3) A civilizational scenario, which is driven by harnessing originality to benefit from it, understand and contemplate it as intellectual mechanisms that stimulate cognitive creativity, innovative behavior and design thought, which push towards finding a qualitative development shift that combines originality and contemporary requirements. We concluded that the third scenario is the best one because it will enhance the interaction of the competencies and minds that belief in a culture of design and innovation thought and not in the thought of reproducing, copying and trading the ancient elements. It will also generate minds that believe that culture and heritage are a renaissance rather than a cultural boom! This pushes towards a comprehensive development that engages many governmental and private institutions, which makes them taste the importance of supporting innovation and design in the fields of culture and heritage, and hence will make them part of a knowledge and interactive movement between things, ideas and people. In order to demonstrate the effectiveness of the third scenario, Al-Janadriyah Innovation Model (JIM) was proposed, which is an administrative structure for the future of the festival that is based on three foundations: the first foundation is understanding the sources of knowledge that enhance the culture and heritage of the societies of the Arabian Peninsula and deals with it as a resource of data, information, knowledge and governance that are inexhaustible as long as there is contemplation and exploration. The second foundation is developing the ideas of Augmented Culture, which creates awareness and depth in linking past achievements and experiences with the reality and progress of the present and the aspirations of the future. The third foundation is the generation of questions that stimulate research and exploration by talented people, craftsmen, designers, entrepreneurs, etc. Among the outputs of the third scenario is the possibility of making Al-Janadriyah a type of modern Islamic endowment based on the development of creativity, innovation, invention, design, and arts emanating from the history, architecture, civilization, culture and heritage of the Arabian Peninsula in general and SAUDI ARABIA in particular. There is no doubt that such an approach will be a pioneering idea and a qualitative development shift in line with the principle of culture-based innovation from the point of view of Islamic intellectual leadership.

11.2. Recommendations

The researcher recommends that the Saudi Arabia needs creative development models that give its great Islamic culture and authentic Arab heritage a priority and allow the Saudi Arabia to activate the spirit of enthusiasm and entrepreneurship in its community towards exploring knowledge, activating talents, enhancing the ability to innovate and design, stimulating production and manufacturing, and generating ideas and inventions. The researcher is not in favor of an enormous cultural movement in Saudi Arabia, which does not exceed being a Saudi cultural boom that consumes huge amounts of money without real global competitive development returns and which may resemble the Saudi oil boom, which spent most of its money in real estate and building huge oil projects without Real investment in building cadres based on the ideas of innovation, design and global competition in all fields. Through its development plans or future visions, the Saudi Arabia needs to reconsider investing most of its money in developing its qualitative human resources, and this cannot be achieved without accelerating the strengthening of the education sector in the areas of design and innovation in particular, and effective investment in the minds of its youth who are returning from the best international universities! Moreover, the Saudi Arabia should not disregard its national interests in its huge agreements with countries of the world. Moreover, it should not be enough to deal with the oil wealth by adopting the traditional idea of selling and refining while others are using it to manufacture more than six thousand products. Oil in the Saudi Arabia must be part of its contemporary culture. Originality and modernity cannot be separated, and it is best to deal with them as united together. There is no doubt that Saudi Arabia strongly supports two important modern sectors, namely information technology and artificial intelligence. Despite their importance, these two sectors do not contribute to increasing Saudi Arabia's relatively low ranking in the classification made by respectable global bodies in the field of innovation, invention, design, and entrepreneurship, etc. This would create apparent developmental progress, but implicitly the Saudi Arabia still needs a significant participation in the knowledge industry and preparation of intellectuals who can shoulder the competitive responsibilities of the future that are certainly not limited to the super industrial powers as was the case previously.

The Saudi Arabia has many civilizational and natural resources and its Islamic and Arab position is great. Moreover, it has an ideal human power most of which are educated youth. However, it needs creative decision makers who are able to develop methodologies that enhance the activation of these components and the growth of ideas around them, which stimulates society to participate in development and explore new topics that need development, innovation or design. One of these important and contemporary methodologies is the culture-based innovation methodology and in order to be activated within Saudi development strategies, we must upgrade from the traditional view of cultural and heritage resources to a holistic view based on renewed cognitive awareness, and the power of analysis and synthesis based on philosophy that creates a link between innovation, creation, design with things, ideas and people. We called this strategy *culture apperception* and it needs three components: thinking differently, the ability to abstraction through analysis and synthesis, and a talent with a broad imagination that is able to develop multiple perceptions and scenarios by generating smart unconventional questions such as: How do we innovate using culture and heritage? What can we innovate out of culture and heritage? Are there solutions to our contemporary issues that can be deduced from culture and heritage? This would make us deal with a new field we called culture augmentation.

To conclude, may one ask; what makes the researcher optimistic that the culture-based innovation methodology will find great popularity within societies that have a large cultural and heritage base, which is also mentioned by Andreas Weigend²³⁴, who indicated that in the coming years data and information will double dozens of times compared to its size today, and most of these additions will be about social data and information. He adds that the most important thing about these additions is the ability to produce better products using this social data, and hence focus on how this data is invested in product design. This approach is considered natural if we look at it historically, were nearly fifteen centuries ago, man shifted from searching for food to agriculture, which was only possible by domesticating animals. Also, man could not achieve his revolutions without developing "his world of thoughts" and his abilities to adapt "the world of things" for the service of

²³⁴ Andreas Weigend (1961) is the former Chief Scientist of Amazon.com and the author of the book *Data for the People* (2017). He is a member of Germany's Digital Council "Digitalrat." He teaches the "Social Data Revolution."

humankind. The first industrial revolution (1760-1840 AD), for example, was triggered by ideas about the invention of the steam engine and the construction of railways, which created the world of mechanical things. As for the second industrial revolution that started in the late nineteenth century until the beginning of the twentieth century, the most important pillar of which was the direction of human thought towards mass production, which was reinforced by the invention of electricity and the different methods of assembly. As for the third industrial revolution, which started in the sixth decade of the twentieth century, it was the beginning of the computer age and the digital revolution during which human thought was able to develop electronic semiconductors and produce central computers, followed by personal computers and later by the Internet. Many scientists consider that human thought and its great potential in dealing with the world of material and moral things has become beyond imagination and is greatly accelerating towards a future that depends heavily on the revolution of data and information. They see that this revolution will not only be about smart devices and systems but will include a much broader range, including all knowledge, education, economy, health, transportation, etc. In short, the revolution that we are living in now is a revolution that relies on data, information and knowledge and this fact cannot be ignored. There is a saying that innovation comes from many places and in different ways, based on the attitude that data and information reinforce cultures. From this standpoint, the researcher believes that culture-based innovation cannot be separated from the fourth digital revolution that the world is currently experiencing and is by all accounts different from previous revolutions.

There is no doubt that this approach will enhance the future material and moral innovations because the data that will be collected, explored or analyzed by models based on such an approach (models of this thesis for example) will be able to devise interesting cultural information when interacting with the huge global data network, which makes us able to create stories and scenarios and cultural and heritage scenes closer to reality, which fulfills our curiosity, our passion, our questions and the facts we want to uncover secrets of which. Also, the cultural data will be converted into visual scenes, where we can see the past life with its details and link it to the present and the future. Add to this, the more we delve into analyzing and synthesizing the cultural information, the more it becomes inspiring to our ideas and stimulating to be used within projects, services and products. This trend will highlight a very

important point, which is the ease of combining the characteristics of culture and heritage from different languages and sources, which makes us able to, first, understand them better, and to disassemble and reconfigure them to generate new ideas or properties, creating effective communication between different cultures, secondly. In general, we can say that the sustainability of collecting or exploring data about culture and heritage through methodologies of innovation, invention, design, etc. will help build a cultural virtual reality that connects the past, present and future, which puts us in front of a body of creative knowledge that require intellectuals who know how to invest it.

...The end of thesis...

I ask Allah to make it a useful knowledge for all mankind.



Appendix 1

THE ANALYSIS AND DESICCATION OF STUDY ARGUMENTS

First. Diversification of Economy

The Five-Year Development Plan in Saudi Arabia consists of five years, and it is based on the national development strategy and the long-term planning which are of the most important mechanisms that the State depends upon in the preparation of its annual budget. The first formal plan of the Kingdom began in 1970 and this does not mean that Saudi Arabia did not have development plans before. Before year 1970, the development in the Kingdom could be divided into four stages: 1) Development before 1948, which is considered the stage in which oil has been discovered, specifically in 1939, but no oil resources were developed then because of World War II, and the things were striking economically that the total Kingdom income at that stage until 1944 was less than four million dollars a year, then it went up to reach US \$ 85 million in 1948 and from that time the Kingdom began shifting abruptly from reliance on a simple economy based on herding, pasturing and agriculture 90% to an economy that depends 60% on oil revenues. 2) The first stage of development projects (1948 AD – 1952 AD), and this period is described in the English Document as "period of innovation" in the Kingdom for being a major turning point in the Kingdom march towards the new projects and development and economic organizing. At this stage, electricity networks and radio station were set up, the port of Jeddah was built, in addition to the establishment of schools, institutes, colleges and the railway between Dammam and Riyadh, the issuance of newspapers and magazines, the establishment of the oil pipeline that runs through the Arabian Peninsula, the operation of oil tankers in the Persian Gulf on east coast of the Kingdom and the establishment of an oil refinery. The most striking economic consideration is the increase of the oil production from one million barrels per year in 1939 to 60 million barrels in 1946 to reach 200 million barrels in 1950. Looking into this period, from a development perspective in our modern era, we find that the Kingdom of Saudi Arabia has achieved during ten years the so-called unprecedented innovations development as a result of transforming its economy from a simple economy to an economy that bears the highest measures of progress by then. 3) The beginnings of development (1952 AD – 1970 AD): a stage of not less importance than its previous ones. During this period, the country's GDP increased by an average annual rate of 10.6%, which helped to create the basic supplies of the State and the great expansion in education and health services, the manufacturing industries have grown, and signs of profound impact changes began in the social and demographic structure of the Kingdom, where the Riyadh emerged as an important capital in the heart of the desert, Jeddah and Dammam as commercial centers, and Mecca and Medina as Islamic centers, which all had to be developed in line with their importance. (*Third Development Plan, p. 34*).

As can be seen from this historical narrative, Saudi Arabia development accelerated stunningly and changes took place significantly at all levels, making it announces its First Development Five-Year Plan (1970 AD – 1975 AD), which included a sense of the Kingdom Government that oil revenues have made it stray too far from the diversification of its revenues making migration from villages to cities increase, beside the abandonment of farming and pasturing and therefore leaving some of the traditional crafts and industries. A lot of skills, specializations and labor were brought into the Kingdom that were unavailable to cope with the development in all

educational, health, economic, and service aspects and others. So the objectives of the First Plan came compatible with this feeling in three key points, namely: continue the increase rate of production growth, development of human resources, and "diversification of the sources of the national income and reduce dependence on oil by increasing the contribution of other productive sectors in the GDP." (*First Development Plan*, p. 25). Since that time until our present time, the term "diversification of the sources of income" has become more or less repeated in all development plans, as we will see. In the Second Development Plan (1975 AD – 1980 AD), the first objective was "to accelerate the exploitation of all the human and natural resources effectively to achieve a high rate of economic growth and reduce the dependence of the Kingdom on one exhaustible source of income (the oil). The State is aware that achieving this goal necessarily requires diversifying the production base by encouraging the expansion of agriculture, industry and mining sectors, with particular emphasis on the petrochemical industry and mining industries as the Kingdom has relative advantages compared to other countries. The State always aimed at encouraging the private sector to expand in the different aspects of such activities by providing facilities and incentives adequate for their launching" (*The Second Development Plan*, p. 28). Then that was repeated in another way in the Third Development Plan (1980 AD – 1985 AD), where the objectives stated in it were "the diversification the economic base of the Kingdom was of the most eminent fundamental objectives of development in the long term .. and giving priority to invest in the productive sectors such as agriculture, industry, mining ... while the private sector undertakes the development of the productive sectors, meanwhile the role of the State was supportive and promoting to the private sector in carrying out its duties by providing information, conducting research and studies in investment opportunities, provide the necessary support, with the basic supplies and services, and define investment priorities." (*Third Development Plan*, p 81.82). In the Fourth Development Plan (1985 AD – 1990 AD) reference was made to "reduce dependence on production and export of crude oil as a major source of national income" and "continue to make a real change in the economic structure of the country's ongoing transformation toward the diversification of the production base by focusing on industry and agriculture" and "the development of the mineral resources and encouraging their exploration and investment". This Fourth Plan gave some details with respect to the diversification of the Kingdom future production base, such as setting up new prospects in the public sector growth to stimulate the private sector growth in the service industry, for example, the financial sector and the modern scientific technical applications, and also put consideration of the population growth in Saudi Arabia and qualify them to participate in the development process in an expanding economy. The Plan also considered the new opportunities in the market based on the growing strength of the private sector through increasing cooperative ties and relations between the Gulf cooperation Council Countries (GCC). The Plan further looked at the new responsibilities that require the will and determination to achieve the multiple opportunities in the private sector to be converted from traditional visions to the world views in the construction industry businesses, with creating products that require advanced techniques which in turn call for new forms of regulation and administrative structures that fit with these. The Plan also considered the technology and its diversity by importing modern technology and the introduction of foreign skills and experiences and providing machinery and equipment, where the plan suggests that the role of the government will be supporting the economy in all possible ways to move forward in

order to bring about a change in the infrastructure. Too much have been addressed in the Plan, but no room to discuss here. (*Fourth Development Plan*, p. 75-77).

The Fifth Development Plan (1990 AD – 1995 AD) came to emphasize the broad general objectives put forward by the Fourth Development Plan, but through policies and directives required by the circumstances that have occurred in the years of the Fourth Development Plan. In this Plan, one of the most important objectives was achieving economic stability after the fluctuations occurred in the prices of oil, resulting in an impact on the government revenues and a contraction in the economic activities, which shook the private sector confidence in the national economy, and therefore necessitated the need for an organizational development to support the government and private sector institutions, as well as expansion in the development of the role of the private sector being the cornerstone of the task of the targeted economic diversification through availing the favorable climate by the government and represented in the administrative systems, financial incentives and the different information in order to encourage investment. This Plan continued also to improve the efficiency of performance in the public sector and the need to avail competitiveness and improve the quality of services, the development of the Saudi Arabia skills and increasing the size of the contribution of the Saudis in the fields of responsible and productive work in both the public and private sectors, and provide government services in various regions of the Kingdom in a balanced way beside the development and improvement of science and technology through scientific research and supporting technology transfer efforts. Among the most important benefits of this Plan are as expressed in the following words: "the economic conditions, that prevailed during the Fourth Development Plan, assured the need to reduce the national economy dependence on the oil sector, and this was one of the most important goals of development since the First Plan, in which respective field a concrete advance has been achieved. However, it is becoming increasingly important to accelerate the change in the economic structure, in particular during the Fifth Development Plan by taking actions and policies affecting in this direction, and in this respect the targeted leading sectors were defined: manufacturing industries, agriculture, financial services, business services, the mineral resources sector and the sector of construction which has large competitive capacities, in addition to the major development experienced by the petrochemical industries with the related complementary products; encouragement will be heading to many other industrial projects on a larger scale." (*The Fifth Development Plan*, p. 90).

The Sixth Development Plan (1995 AD – 2000 AD) is deemed of the most plans that have faced unusual circumstances the most important of which was the impacts of the Gulf War with the large decline in oil prices and the three important regulatory systems changes brought by State: the Bylaws of governing, the system of the Shura Council, and the regions system. The effect which has become more eminent was the escalating population growth and which affects the economic and social policies, the most important of which were the provision of education, employment, housing and subsidies, beside the rising demand for the basic services and supplies as of electricity, water, communications and health. Furthermore, of the conditions faced by this Plan was the reduction in the State resources which necessitated funding the deficit from the government reserve and through borrowing. In general, the Sixth Development Plan has faced difficult financial conditions, forcing the government to increase the production capacity in the oil sector and ensure finding marketing channels in the oil consuming countries beside creating new outlets in Asia and Europe markets. The government resorted, by the end of the Fifth Development Plan,

to the privatization system, which is transferring the ownership of some activities practiced by the government to the private sector through the privatization of funding, production and privatization of property and finally liberation of the economic activities. One of the important things that coincided with the Sixth Development Plan was the international conditions in the growing role of the scientific and technical capacities in determining the relative merits of the international trade and the decline in the relative importance of the natural resources, as well as the increasing international competition to attract foreign capitals and investments to other parts of the world, which obligated the government to look for policies suitable to attract the foreign investment and expand its role in the transfer of technology. In this regard, the Plan concluded that its preparation "under the double impact of the conditions of internal and external factors, so it was natural that all these circumstances and factors must be taken into account within the long-term vision for the future of the Saudi economy and exploring growth paths in the medium term; large and increasing social expectations and hopes beside the continuing massive financial obligations all require to take urgent action to raise the level of efficiency of the national economy and create opportunities for the private sector to invest its financial resources inside the Kingdom." (*The Sixth Development Plan*, p. 91). To achieve this, the State headed firmly towards the most important development field that has not been focused on intensively in the past and which is the development of the Saudi manpower and increase employment by addressing the constraints faced by this, in parallel with replacement of the Saudis in place of non-Saudis, encouraging the private sector to provide job opportunities for Saudis, and then comes the development of the economic efficiency through channels that we have already mentioned some of them, in addition to strengthening the role of the private sector in the diversification of the national economy, and take science and technology issues very seriously, particularly with regard to the multiplicity of scientific and technical innovations and research, findings and inventions and to reduce the technical gap relied on by the Kingdom in the import of technology and expertise, where the Plan pointed out that "dependence on imported technologies without the ability to develop will not enable the Kingdom to keep pace with advanced scientific and technological developments, and to address this matter it is necessary to focus on technologies that help enhance and develop the capabilities of the Kingdom in the field of applied research and the development requirements in the Kingdom" (*The Sixth Development Plan*, p. 98).

Then comes the Seventh Development Plan (2000 AD – 2005 AD) and the Kingdom enters the twenty-first century facing the challenges of globalization, advanced technology and information and communication revolution and heavy reliance on economics and knowledge investment and other challenges. Therefore, this Plan was built on 17 strategies followed by 97 policies for implementing its goals. The most important of these objectives relating to the diversity of revenue is the availability of tributaries that make the citizen productive and able to give with the expansion of the provision of services and diversity in methods of their financing, management and the continuation of manpower development and the establishment of the Saudi workforce in place of non-Saudi workforce, and also increasing the contribution of the private sector in the economic and social development processes, with continuing reducing dependence on production and export of crude oil as a major source of national income, while continuing to diversify the sources of national income and the expansion of the productive base in the area of services, agriculture, industry and other targets. But what concerns us is the continuing claim to the development of non-oil revenue for being the most important alternatives for diversifying sources of income, so as not

to subject the general revenues of the State to sharp fluctuations as a result of fluctuations in the international oil prices and this was evident during the wars and crises experienced by the region. The Plan clearly indicates the importance of this as "despite achieving a relative improvement in non-oil revenues over the previous five-year Plans, but it is still below the level of prospects hoped for, given the multiplicity of economic and social issues and dimensions interrelated, which requires the preparation of specialized and careful studies to determine the best alternatives available" (*The Seventh Development Plan*, p. 128). In the opinion of the researcher, the reactivation of the alternatives is limited by the development plans in a financial economic thought, more traditional than innovative, qualitative and renewed; the State, instead of moving towards a quantum leap in design and manufacturing, has headed towards enhancing its economic ability through the revision of the tax system, simplifying procedures and increasing the State revenues from customs, adjusted fees on government services commensurate with the cost, and adjustment of fees charged for bringing in foreign workers to rationalize and support the Saudization programs. The alternatives also provided for exploring the untapped mineral wealth sources and their development.

The Eighth Development Plan (2005 AD – 2010 AD) is deemed the first loop in the strategic economic path that extends to twenty years and includes four consecutive five-year plans. The Plan touched on important themes that were not addressed seriously in the previous development plans because of the belief that they were secondary, or that they reflect qualitative development errors for which not much was taken in their respect at the time? Therefore, they became important themes and serious negative obsession. Of these themes is considering lifting the standard of living and quality of life commensurate with the requirements of life because they help reduce the large proportion of unemployment and tackle the poverty growing phenomena! The Plan touched on the balanced development between regions of the Kingdom and human resource development. With regards to the diversity of the economic base – we are concerned with, the Plan indicated that the previous plans have made remarkable progress in this area, but in light of the increasing and accelerating challenges, the Eighth Development Plan will look to "accelerate the growth rates of eligible sectors to contribute actively to the diversification process, and the most important are the industries that depend on the exploitation of the relative advantages of the national economy and turn them into competitive advantages, including petrochemicals and oil refining industry, and also the attention to industries of multi investment, the most important are natural gas and mining industries, pharmaceutical industries, and the service sector as tourism, transport and insurance. The Plan also urges on capital goods industry, such as metal products, machinery and equipment and electric supplies industry. Furthermore, the Plan also promotes industries of knowledge-based economy which have become important on the global scale, the most important of which is IT industry. The Plan has referred also to the interest in small and medium enterprises for their important role and contribution to the diversification of the economic base and providing more job opportunities. The Plan also urged paying attention to the manufacturing industries export-oriented as food processing, building materials and plastic products, what is so-called development of non-oil exports and products. The Plan is also concerned with the tourism industry and the agriculture sector, which uses advanced techniques to rationalize water use and improve the efficient use of the natural resources. As regards the domestic and foreign investment, the Plan states that "despite the efforts and reforms implemented during the successive five-year plans in general, and the Seventh Development Plan in

particular, to provide the right investment climate, however, the status quo for investment still requires raising the investment growth rates to ensure building a cumulative financial capital growing structure able to achieve a quantum leap for the national economy that opens greater prospects and job opportunities that help attract available human energies and accelerate the overall development." (*The Eighth Development Plan*, p. 41). One of the things that were touched upon by the Development Plan is the institutional and administrative developments, the most important of which are: overcoming the obstacles to investment, development of systems and improvement of the performance efficiency of the government agencies and parties. The Seventh Development Plan has witnessed in this area very important institutional development represented in the adoption of the foreign investment system and the establishment of the General Authority for Investment, the Communications and Information Technology Commission, the Saudi Industrial Property Authority, and the Regulatory Authority for Electrical Services, beside licensing to international investment banks, and others. The Plan addressed also the allocation of more activities and public facilities and services to raise the level of participation of the private sector in the economic activities and the creation of competitive environment and what needs to be done to overcome the obstacles, beside the provision of local or international consultancies. Of the things that have been discussed by the Plan are the difficulties that may face the financial stability due to the sharp fluctuations in the oil revenues, also rationalization of water consumption, the development of science and technology system, paying attention to informatics and supporting and encouraging the scientific research and finally keeping up with the trend towards a knowledge economy. The Plan has touched on the impact of the economic, social and cultural implications of the negatives issues that could be caused by the system of globalization. Some of the most important themes in the Plan are: increasing the participation of women, consolidating the role of the family in the community and preserve the Arab and Islamic values with the development of their talents and abilities.

The Ninth Development Plan (2010 AD – 2015 AD) is the second loop of the strategic path of the national economy system that extends for twenty years and which started from the Eighth Development Plan. This Plan has focused on many of the trends of the Eighth Plan with giving importance to the new issues; the level of living and the type of life became supported through three tracks. The first track is to continue raising the level of the citizens' income. The second track is the quantitative and qualitative improvement of services, while the third track is the development of the productive and creative capacity of citizens and providing gainful employment for them, and expanding their participation in various economic activities and thus reducing unemployment rates. The Plan highlighted also supporting the trend towards knowledge-based economy, which depends on the promotion of human development and dissemination of knowledge and expansion of the options available to the community members to acquire knowledge, skills and expertise, and also promoting the efforts of transferring knowledge and their establishment with raising the level of the Kingdom in the production of knowledge and the quality of its content at the level of public and private sectors, and to continue providing the technical, administrative and regulatory environment, and raising the quality of the environment infrastructure for information technology and communications. Of the important issues also is to reduce the knowledge gap among the regions, support innovation in all fields in all parts of the Kingdom. One of the new themes in this Plan is to strengthen the competitiveness that always helps the Kingdom to take up special economic status

distinguished at the international level and in light of the challenges of globalization. Furthermore, of the most important themes in this area is raising the education level of the workforce, raising the participation level of Saudi Arabia women in the workforce, and increasing associations of cluster businesses, which consist of a number of industries and companies and institutions with strong links and relationships that contribute to increasing productivity and stimulating innovation and coming out with new business facilities, and boosting investment in research and development and innovation activities and preparation of specialists in the fields of science and engineering, and the consolidation of the academic community and the business community, as well as the trend towards the development of the family businesses to increase their competitiveness and development of their administrative methods. There is also the trend towards the national exports of non-oil with high technology, not just suffice with the simple technology, such as clothing and food processing industries, paper and iron and steel products and jewelry. Finally, of the main competitive targets set by the Plan is to move the national economy to the competitive stage based on innovation.

The Tenth Development Plan was not issued in details by the time of the preparation of this research, and this is attributed to the issuance of a new vision under the name of Vision 2030 which has been prepared by the new government after the death of King Abdullah bin Abdul Aziz. One of the main objectives and policies of the Tenth Development Plan is that it is the third loop in the strategic path system of the national economy that extends for twenty years. The Plan is made up of 24 goals and contains a lot of new ideas, the most important of which is to deepen the economic diversification through three dimensions. The first dimension: the vertical diversification and specific for raising the investment rates of the mineral wealth and the expansion in the production of the raw mining materials, and the development of the productive and service activities related to oil and gas. The second dimension: the horizontal diversification, from which is the expansion of production capacities for the industrial sector and the development of the service sector of all kinds and investment in energy projects, the diversification of economic activities in the non-oil sectors of promising competitiveness with development non-oil exports, stimulating local and foreign strategic partnerships to invest in the Kingdom, with the development of the agricultural production and the development of fishing activities. The third dimension: spatial diversification, which is benefiting from the comparative advantages of the regions in promoting diversification of spatial economic activities and the establishment of industrial zones and incubators for businesses and technology. One of the important objectives is the shift towards a knowledge and society-based economy through the dissemination of knowledge, investment of knowledge, generation of knowledge and management of knowledge. Of the important trends is to direct the national and foreign investments towards sectors of technical and high value-added content with what is required as of stimulating creativity and innovation. Finally, of the goals that will have a positive impact is the development of the sector of small and large businesses through organization, management, funding and the scientific and technical development.

Second. Knowledge- Based Economy

It is important to know the strategy of the economy and the knowledge society issued by the Government of the Kingdom of Saudi Arabia, and the emanating science and technology strategy, because both are the backbone of the competitive future of the

Kingdom, as well as the strategies add to them recently from the vision of the Kingdom of 2030 which all aim that Saudi Arabia becomes by 2030 a knowledge society based on science and technology in light of a knowledge-based economy, prosperous and diverse in sources and possibilities, led by the producing human capacities and the private sector, and provides a high standard of living and the quality of a decent life, and that occupies a prominent position as a leading regional and international State in the diversification of the economy while preserving its Islamic values, culture and heritage, etc.

1. Knowledge and Economy Society

The Eighth Development Plan (2005-2010) has formed the core base of the stone towards a knowledge-based economy. Implementation of the First Five-Year National Plan for Science, Technology and Innovation has been initiated, in addition to the implementation of the National Plan for Information Technology and Communications, the National Industrial Strategy, the Strategy to Support the Talent and Creativity and Innovations, and the City of Knowledge, the establishment of Industrial Property Authority and Technical Areas, the establishment of King Abdullah Economic City, the new strategy for higher education .. The Ninth Development Plan (2010-2014) has adopted the trend towards knowledge-based economy by focusing on education and the promotion of the Saudi economy, and the creation of competitive advantages with the diversification of the economic base and raising the competitiveness of the national products and exports. The strategy hired large national competencies in all fields and sectors and viewed many experiences and cooperated with the State of Korea to develop its strategy, and it has built its objectives on World Bank studies, which urge the acquisition of knowledge and its generation, dissemination and investment effectively to achieve a qualitative social and economic development. The strategy included: 1) Knowledge Generation Activity: It depends on the development of the spirit of innovation in all segments and strata of society on the one hand, and on carrying out research and development in all the State institutions on the other. 2) Knowledge Transfer Activity: It is accomplished through two channels: the first channel where knowledge is transferred directly through obtaining privileges, patents, information, expertise and skills .. The second channel, knowledge is transferred directly through the purchase of high-tech production lines, machines, equipment, or foreign companies with encouraging technology companies to come for direct investment and technology transfer. 3) Accumulation of Knowledge and its Management Activity: It is the accumulation of knowledge wealth or accumulation of intangible assets in order to sustain the creativity and innovation process. 4) Activity of Dissemination of Knowledge in the Community and Economy and the Various Sectors: This is handled by many institutions concerned with knowledge issues.

For the Kingdom to transfer to a knowledge based economy, it must exert a lot of effort to enhance the innovative capacities of the community, and of the most important of these fields that help this: education, science and technology, innovation, information and communication technology, industry intensive based on knowledge, and urban development. To achieve this, it is required to continue and expand the new policies and strategies that we mentioned some earlier and also their improvement, with the development of new policies and introduction of major structural reforms to the existing policies.

The strategy suggests that education in the Kingdom of Saudi Arabia has seen quantitative spurts on the side of enrollment and also graduates, but it suffers from major structural problems, such as the poor academic performance of the students, and lack of teachers and faculty members of high competencies, in addition to the

weak competition between schools and universities. Education in all of its kinds and at all levels is deemed the first challenge to Saudi Arabia in its orientation towards a cognition society. The strategy also reached to two important matters that were mentioned previously, namely the low productivity of the manpower and the unemployment rate of both sexes in adulthood stage. With regard to education, the trend towards its development will be based on three stages: 1) Strengthening capacities for research and improving its quality, keeping abreast of international levels, independency of the academic credits and restructuring of internal management to improve the efficiencies of the leading higher education foundation .. 2) Funding competitive researches that support the consolidation of knowledge and achieve the national supreme goals, preparation of the Saudi Arabian project minds of the Twenty First century, inviting leading global universities to work on Saudi Arabia land and the adoption of local and international systems assisting in teaching and research .. 3) Provide grants assigned to performance and merit, develop the governance system, the promotion of decentralization and dissemination of competitiveness.

The strategy assesses the Saudi Arabian innovation system as unsatisfactory and this is due to: 1) the insufficient research capabilities of universities and public laboratories compared with the developed countries. 2) The gap between knowledge production and its investment mechanisms. 3) the absence of clear policies for the technical development of industry. 4) The lack of coordination and integration of the government initiatives.. That is what makes an imbalance between jobs of low production in the government sector with high-productivity jobs in the private sector due to the fact that the knowledge society urges the cooperation between both sectors, which requires changing the current structure of the labor market and the behavior of the employees and their attitudes, as well as educating the youth to respect the culture of work ..

In general, the strategy reached to points of strength in the Kingdom representative in: a stable government and leadership reformist oriented, with the availability of large and promising natural resources, and high constituents and possibilities of the private sector, in addition to that there is a well-developed partnership state-owned and advanced infrastructure for telecommunications and advanced information technology and remarkable large global companies (as Aramco and Sabic ..). Furthermore, the Kingdom has local competencies and talents of high-level, a consolidated education system that enjoys continuous development, and safety and social cohesion and authentic Islamic values .. The weaknesses are represented in: the economy of a yield, administrative cadre that does not rise to the required level, and a public sector that suffers inflation and lacks highly qualified people. Besides, the Kingdom economy is still greatly dependent on oil beside a weak industrial base. That is why there is a lack of competences in the mid-level and above with weak incentives and discipline at work, and the limited participation of women .. The opportunities are: the Kingdom enjoys Islamic religious values, a variety of Arab culture, geopolitical benefits, huge income from oil, growing successful reform cases, a large domestic market, freedom of international movement of qualified competencies and companies, and global memberships, including the World trade Organization and the Gulf Cooperation Council .. The challenges are: fluctuations in oil prices and the inadequacy of new jobs in the private sector, and the most important is to how to invest the youth who are the most census of Saudi society and witnessing growing rapidly.

2. Development of Science and Technology

It is the responsibility of the King Abdul Aziz City for Science and Technology, which is deemed one of the most important government scientific research sectors in Saudi

Arabia, carrying the responsibility of supporting scientific research and development and investment in the national system of science, technology and innovation. It is also the most important sectors in promoting the building of a knowledge society, which the Kingdom seeks to establish as we already mentioned. The vision of King Abdul Aziz City is "to be a foundation for science and technology, a global leader that sponsors innovation and promotes the construction of a knowledge society in the Kingdom" (Annual Report 2014, p. 9). The Comprehensive National Strategy for Science, Technology and Innovation of the Kingdom of Saudi Arabia contains the adoption of a comprehensive vision for the development of a science and technology and innovation system that interacts with the economic, social and cultural activities, activating the role of education and training and raising their extensive and versatile efficiency, and promoting and developing the national capacities in scientific research and technological development and coordinating their efforts to ensure meeting and integration with the community needs and requirements of sustainable development. It also includes the adoption of main directions of scientific research and technical development, and promote, develop and diversify their sources of financial support for the activities of the national system for science, technology and innovation, and works on transfer, localization, deducing and developing the technique appropriate to raise production efficiency and enhance competitiveness. The National Strategy is keen to support and take care of the national human capacity for creativity and innovation as creating the appropriate environment, providing opportunities, encouraging individual and collective initiatives in the public and private sectors, attention to innovators, inventors and creators through the development of diverse entrepreneurship and economic incubators, activating the role of scientific societies while enabling the community to take advantage of them and interest in the intellectual production of scientists and publishing it. The Strategy also includes the development of the systems that govern the performance of the national system for science, technology and innovation, and the development of various aspects of scientific and technical cooperation at the Gulf, Arab, Islamic and international levels, with a focus on cooperation with countries and institutions advanced in the fields in which the Kingdom is seeking scientific and technical leadership .. and to provide scientific and technical information and facilitate all control ways to access them in the context of systems consistent with the objectives and conditions of the Kingdom .. all through the support and development of national rules for scientific and technical information and the adoption of national programs and systems that work on promoting the production, transfer and dissemination and exchange of information, and to facilitate their use and linking the scientific institutions and research centers with a national information high-speed network, to share experiences at home and abroad, enriching scientific research and technological development, support and enhance the status of the Arabic language in the field of information technology, and so on. With regard to the future outlook of King Abdul Aziz City to activate science and technology in general, and innovation in particular, four stages were identified and these are: completing the infrastructure for science, technology and innovation 2014 AD, pioneered in the Middle East 2019 AD, access to the ranks of the developed Asian countries 2024 AD, access to the ranks of developed countries industrially 2030 AD.

3. The Vision of the Kingdom to 2030 and the Shift in 2020

The Economic Council to the new government of the Kingdom of Saudi Arabia has developed a new vision that is called the 2030 vision, which coincides with the Tenth Development Plan (2015 AD – 2020 AD), the vision was not detailed in its final form, and how it is to be linked with the march of the other development plans, strategies

and policies. The researcher believes that the Tenth Development Plan will include the vision orientations and programs, the most important of which is the so-called 2020 AD shift. Vision 2030 is built on three basic elements: the Arab and Islamic depth of the Kingdom, the pioneering investment power of the Kingdom, and taking advantage of the geographical location of the Kingdom linking the three continents. From these constituents, the vision depended on three axes: the dynamic society, the booming economy and the ambitious country. In order to activate the vision based on its values and the six axes mentioned above, goals and commitments towards it have been put up, such as restructuring the government, achieving the fiscal balance, project management, review of the systems, performance measurement, restructuring of the Public Investment Fund, the human capital, the oil strategy through Aramco company, the expansion of privatization, the strategic partnerships with the world, and finally the national transformation program 2020 AD, which works on identifying the national priorities and the proposition of initiatives necessary to achieve them. It is in five stages: the stage of defining the challenges in order to achieve the vision through benchmarks that give preliminary results in 2020, the stage of development of a supportive strategic initiatives to achieve the objectives of the first stage, the stage of setting up detailed operational plans for implementation of the initiatives of the second stage, the stage of promoting transparency and dissemination of results, the fifth and final stage is the review and continuous improvement and launching new initiatives. With respect to the first stage, it has been completed through a program that included 24 government bodies as a first phase and the other bodies will be added at coming phases; the first stage has reached to the adoption of 543 initiatives which are likely to start by year 2016, where the total costs for the next five years are estimated at 270 billion Riyals.

Third. Innovation, Creativity, Giftedness and Design

The First Development Plan (1970 AD – 1975 AD) used the term “innovation” with two authorities: The Airline of Saudi Arabia, which sponsored innovation in its administration and services (p. 28), and actually one of the most important advantages of the Saudi Arabian Airlines was and still is its commitment to Arab-Islamic values as travel Duaa when boarding and all its meals are Halal and they not to service alcohol or allow to drink it on board of its fleet. It also favors the religious value to the economic revenue by turning some of the aircraft seats to be a space for the performance of prayers. In general, the Saudi Arabian Airlines has marvelously succeeded in the past, but today it needs another innovative thought that takes into account the global competitiveness. The second authority is the agriculture sector, which has encouraged the farmers and traders to rely on innovation in terms of new seeds and fertilizers (p. 266) and recently it encourages innovation in the economic method of irrigation and cultivation of dry places, as well as the production, packaging and marketing of dates. In the Second Development Plan (1975 AD – 1980 AD) the government has encouraged the industry private sector to adopt (R & D) (Research and Development) and has also urged the Ministry of Commerce and Industry (Trade and Investment today) to take action for the sake of drafting and acting a law of patents and to provide protection for innovations in line with the international practices and laws. It has also began to develop programs and financial incentives to encourage investment in innovation (p. 558). Furthermore, the Plan has provided for establishing experimental schools based on innovation in the educational approach and the use of educational equipment (p. 260). Besides, the Ministry of Health also introduced many innovations within its services (p. 376), and the media began to take part in many international

broadcasting associations and international media organizations to exchange ideas on technology and innovated production (p. 364). The administrative sector was also developed to cope with the innovations of hardware and equipment that must be used (p. 572), and carrying out some experimental projects that simulate researches (p. 376).

The Third Development Plan (1980 AD – 1985 AD) has noted that the administrative and functional organizing and scholarships for training are multiple innovations that were accomplished in multiple government sectors and facilities (p. 62); also from the administrative innovations were the efforts exerted to eliminate the development disparities between the different regions (p. 59).

The Fourth Development Plan (1985 AD – 1990 AD) has dealt with innovation in the field of planning, making the Kingdom one of the few countries in the world that has worked on economic, social and urban planning with integration, and at the same time through the comprehensive survey, detailed studies and structural plans (p. 419). The Plan states that the Arab Islamic cultural values of Saudi society and their customs and traditions have strengthened the community sense of identity despite the great changes in their lifestyle; the material improvement was mixed with the economic social innovations to form the patterns of the contemporary Saudi culture (p. 349). As for the scientific issues, the Plan indicated that the successful application of science and technology should be a key feature of development in the Kingdom particularly with regards to stimulating the national technological capabilities and innovations, and the application of modern technology (p. 315) as agricultural production at the lowest possible cost, with supporting innovation that exploits the most suitable technical possibilities and the natural resources in the Kingdom with the development of the technological innovations. (P. 192)

The Fifth Plan Development (1990 AD – 1995 AD) has touched upon a new government trend which is the privatization programs that can contribute to achieving a number of key objectives towards the diversification of economy and of which are: to increase the private sector investment in the economy, to increase the efficiency of the economy and innovation, to create competition, reduce support and encourage the expansion of distribution of ownership of economic resources. (P. 146) The Plan also indicated that small and medium-sized companies and the accompanying work and development in many countries, are the main source of growth, employment and innovation, and not the large corporations as it is common. Therefore, the successful support for small and medium enterprises requires appropriate government policies, as well as financial and technical assistance. So the Five-Year Plan sought some input support from small producers and establishing the necessary positive measures required for their outcomes and expansion of their exports with the consideration of the establishment of a new bank dedicated to serving their needs (P. 151). We can say that the Fifth Development Plan is the beginning of the participation of the private sector powerfully in the development of the Kingdom, rather its role has become essential in the development of technology through research, development and innovation in partnership with the centers of excellence in universities (P. 295). The Plan has also referred to a strategic goal which is that the well-organized infrastructure is a necessary condition for promoting the innovation sector, therefore it must be upgraded not independently but as part of the same social system (p. 294).

The Sixth Development Plan (1995 AD – 2000 AD) indicates repeatedly to what has been started by the Fifth Development Plan as of expansion in the private sector, improving its competitive position in the global markets, and taking a bigger role in the service of the economic activities, while improving the technical base in many sectors

of the economy and the introduction and development of innovative technologies that suit the local needs (*p. 46*). Thus, the Sixth Development Plan has confirmed that the scientific and technical innovation is the foundation of the economic development and its indicator, because it is an indicator to all sectors and activities of the national economy. So the Plan has confirmed the continued support of science and technology for being crucial factors of development that keep pace with the global developments, which requires overcoming the obstacles they face, including the technology gap, lack of qualified human resources, and the limited scientific research centers. These obstacles cannot be overcome but by importing the latest technology, equipment and management techniques to speed the development process with the fact that this approach was critical in many areas previously, but the subsequent global developments make this an inappropriate approach, which necessitates localizing research partnerships projects, localizing industry and technology and raising the skills and competencies of the human resources, with setting up appropriate plans for technology transfer and its localization, and innovation through it (*pp.96-97*). The Plan also referred to raising the quality of the national products with reducing production costs, and increasing the use of scientific and technical research, innovations and inventions, and because these activities require huge sums of money, the private sector may seclude itself from practicing them, so it must be encouraged practically, administratively and financially. Lack of encouragement makes the private sector, whether large or small companies, seek for quick profit and low risk in making investment decisions, low intellectual level of innovation, and resorting to imitate and simulate a limited number of ideas and old projects, which leads to wasting energies and extravagance in the use of the rare economic resources, this is beside the tendencies of some big corporations to use their funds and profits in fast-term investments rather than long-term investment, and away from areas of their specialization (*p. 157*). This Plan has drawn the attention to something very important which is that most innovations enter the Kingdom through the private sector projects, so the development of new skills and competencies is the responsibility of the private sector with the support of the King Abdulaziz City for Science and Technology.

The Seventh Development Plan (2000 AD – 2005 AD) proceeded to support and encourage innovation, invention, talent and investing in the distinguished intellectual and national products, and to provide opportunities for professionals and researchers to conduct scientific and technological research, and work forward towards localization of the transfer of technology (*pp.100-101*). The objective is the gradual formation of a society distinguished in science and technology, and the implementation of cooperative education programs at all levels of education, and attract talented individuals to join research centers and show the talents and creations of the talented people in the media and the media of various information, and also strengthen the family, the school and the community's role in the discovery for the gifted and caring for them (*pp.102-103*). To achieve this, the Plan continued to adopt the policies of the previous Plans like providing the necessary financial and human resources, and the services that help localize technical and scientific equipment to suit the national needs (*P. 118*).

The Eighth Development Plan (2005 AD – 2010 AD) came with the concept of the knowledge-based economy, which requires continuing efficiently in building a national base for science and technology capable of innovation and creativity and adaptation of technology and development, and also develop technologies and information services to enhance the efficiency of the Saudi economy and building the information society and knowledge-based economy (*P. 365*). This coincides with two types of

challenges that face the higher education sector: the increased demand for higher education, and the increased demand in the labor market on the high-quality professional cadres. As regards the first challenge, it requires more participation of the private sector in the university education, as is the case in many countries. The second challenge relates to the restrictions on the ability of the higher education to balance the distribution of students to the academic disciplines, and the dominance of the theory on applied disciplines. Such a matter requires the adoption of policies and measures based on the needs of the labor market, and the optimization of usage of the data and information from the labor market, beside focusing on the development of skills, and encouraging students to engage in the disciplines needed by the economy with the development of interdisciplinary programs, and innovating new forms of university education (P. 399). The Eighth Development Plan focused also in particular on the reorientation of the scientific and technological education to support innovative capabilities of the Saudi youth and produce a cadre of scientists, researchers and educators who are capable of making a quantum leap in the development of the local technologies (P. 43). This cannot be achieved but by providing an environment of incentives in activating the private sector to invest in innovative education, accompanied by the appropriate mechanisms to ensure quality and enhance the innovative capabilities and orientations through the adoption of the international best practices and cooperation with the international institutions and organizations. (P. 379)

The Ninth Development Plan (2010 AD – 2015 AD) is the first Plan to discuss the concept of development and innovation in the knowledge-based economy through independent threads of their importance. The Plan reminds objectively that, despite the continuous efforts during the previous Development Plans to encourage innovation and activation of science and technology through the continued material and moral support to raise the capacity and output of the universities and scientific research and technical development on the side and also to activate and expand the role of King Abdul Aziz City for Science and Technology to improve the innovation environment on the other side, yet the Kingdom is still behind in these areas and suffers from shortage of professionals and skilled manpower, particularly in the field of science and technology, which in turn leads to an acute shortage of the national highly qualified capacities capable of innovation, which hinders the transfer and localization of the techniques, generation of new ones and the production of goods and innovative services. To stimulate this feature, the importance of investing in education, especially in science and engineering programs, has become a certainly, also encouraging the scientific research and the creation and support of research institutions and encouraging the companies to invest in research, development and innovation and to establish close relations between the academic community and the business community with the protection of intellectual property rights and the granting of awards to commercialize innovations. It is also a must to exploit foreign investment directly in the transfer and localization of the advanced technology in addition to connecting the value and quality of the national products with the value and quality of the global products, which requires advanced high technical skills and innovative knowledge. The Plan also reminds that the private sector investment in research, development and innovation is still limited, which impedes finding economy based on innovations and scientific research and technology. So it is necessary to encourage the private sector to expand its expenditures on research, development and innovation. Furthermore, the Plan reminds that the Kingdom came to own accumulated experience of the knowledge built-up on multiple strategies, including, for example,

the national strategy for the industry, the national strategy for science, technology and innovation, the strategy of knowledge-based economy, and the strategy for the caring for gifted and others... All of these were able to finding a new economy that can achieve access to a rank highly competitive through the move towards increasing the national products and services their preference to the imported products on the one hand, and the creation of effective investment environment to attract national and foreign capital to achieve this on the other (*p. 91*). In other words, the economic vision of the Kingdom through the Ninth Development Plan and after is to be based heavily on the national industries capable of global competitiveness through the creative knowledge and innovative behavior on the one hand, and the conversion of the national resources into sustainable wealth on the other. The most important themes for achieving this is indisputably the continued relentless pursuit and continuous ongoing to fund research, development and innovation to reach 2% by year 2024. Also from themes that have been set up for this were moving the national economy to compete on the basis of innovation, improving the competitiveness of the national products in the local and overseas markets, and supporting the competitiveness of non-oil exports with increasing their technological content. These themes require raising the level of investment in human development, as of education and training at a rate of 8.4% per year, the expansion of science and technology education at a rate of about 11% per year, increasing the number of enrolled in the colleges of science and engineering at a rate of approximately 22.4% per year, continue to develop the investment environment and export environment; intensify technology transfer, localization and generation; expansion of business parks; encouraging the integration of national companies and closer cooperation with foreign high-tech companies; continuous improvement in the quality of the goods and services; increasing investment in the industrial infrastructure and information at a rate of about 9.5% per year; increasing the non-oil exports at an average annual rate of about 9.7%; increasing the participation of Saudi women in the labor force to about 13.9% by the end of the Plan; reduce the employment of foreign workers at an average annual rate of 1.5%, and the production of innovative new goods and services. The Ninth Development Plan has used deep terms in the activation of innovation such as the innovative skills, innovative development, innovative solutions, innovative financing, innovative methods, innovative initiatives, innovative projects, banking, innovative methods, innovative products, innovative technologies etc ... Finally the Plan has touched upon the theme of knowledge-based economy, and it defined it saying that it is the economy capable of producing knowledge, disseminating it and using it. This means that knowledge is a key factor in the growth, creation of wealth and employment opportunities. The knowledge-based economy considers that the human resources are the real capital and what provokes creativity and innovation and generating the new ideas that are needed by today's global economy through the exploitation of the vast knowledge and communication technology being definitive stimuli towards the global competitiveness in the twentieth century (*P. 87*).

Fourth. The National Culture

Of the most important cultural trends covered in the First Development Plan (1970 AD – 1975 AD) is the preservation of the archeological places, their registration, maintenance, documentation and linking to their original sources and past civilizations. Of the trends of the Plan is also the interest in antiquities and to highlight their cognitive values through the establishment of museums and expansion of the public offices and

the dissemination of their culture in the community. The striking things in this Plan are the advance readiness to understand the changes and cultural problems that will face the community due to the shift from a simple interdependent community (nomadism according to the Plan) to a wide multiple community (civil according to the Plan) and from the community production economy (poor, according to the Plan) to oil production economy (booming, according to the Plan) and absorb this through the development process.

The Second Development Plan (1975 AD – 1980 AD) has focused on the culture of artistic interests and supported competitions at the local level, and conducted festivals for acting, music and folklore at the national level, with raising the artistic performance level and encouraging the talented young people in these areas. The Plan also touched on conducting cultural weeks in different regions of the Kingdom, and preparation of the students to participate in the social development, and carrying out cultural activities for the youth as reading and drawing competitions and exhibitions beside organizing cognition trips among the areas.

The Third Development Plan (1980 AD – 1985 AD) was to implant the spirit of pride and self-importance in culture and the cultural heritage in the hearts of the citizens. Of the most important characteristics of their heritage and culture is that its physical and social objectives are derived from the principles and values of the Islamic religion and morals and the deep-rooted Arabian civilization. The Plan was interested in setting up reconciling concepts between the traditional values and the rapid economic change, to reduce the worry of the government and the citizens because of the negative influence of the Western values and the material trends on the local traditional culture and values. In this respect, the Plan made it clear that the size of this effect cannot be estimated due to the fact that culture is no longer just from one source, it may be the realms of education and wealth and the impact of economic, physical and administrative factors. Therefore, this requires an accurate diagnosis based on a set of cultural, economic, social, legislative and administrative concepts and solutions. This Plan continued interest in the establishment of cultural associations and literary clubs and the promotion of culture at the level of the general education and the university education, and continue to hold conferences and seminars on religious, cultural, literary and historical subjects, and continuing to ensure conducting competitions and the establishment of art galleries.

The Fourth Development Plan (1985 AD – 1990 AD) stated clearly that "the culture of Saudi Arabia is part and parcel of the Arab-Islamic civilization, and that it reflects certain technical and intellectual characteristics that go hand in hand with the technical and economic changes, and as the culture of a nation is something ethereal and immaterial, it strongly influences almost all activities of the citizens and that culture is not linked to literature and arts and human sciences only, but it is also linked to the traditions and way of thinking which reflect on the social system and the levels of the individual and community behavior." (Fourth Development Plan, p. 367) The Fourth Development Plan deems culture "a spontaneous movement of the human mind, so it is neither possible nor desirable to plan the culture of the country in the same way as planning roads or agriculture, for example." The Plan considers that "culture is what finds the supporting environment for the implementation of development programs, and likewise the quality and areas of the programs are what affect the movement and path of the cultural flourishing, and responding to other cultures" (Fourth Development Plan, p. 367). The Plan further indicates that the culture in the Kingdom of Saudi Arabia is expressed through a variety of programs such as those related to religious affairs and media education, youth and sports activities, as well as monuments, literature and

arts. There are also the programs that are linked to the social services, the affairs of public libraries and cultural exchange programs between the countries, research and translations and issuing publications on heritage and history and culture. The culture of the Kingdom includes the care for the heritage, crafts and traditional industries, arts and home economics, social and literary clubs and others. The Plan has adopted the UNESCO classification of cultural activities, and it was distributed to the various government bodies, and this distribution varies from time to time in accordance with the new developments and administrative organization. The Plan also referred to a very important thing which is the transfer of technology that happened as a result of the targeted development in the Kingdom and was the outcome of a number of cultural traditions that have enhanced and supported the creative activities, and that is what confirms that the culture of the Saudi people, founded on the Islamic religion and originality Arab, has many stimuli pushing forward to a progress that does not conflict with its values and solid principles.

The Fifth Development Plan (1990 AD – 1995 AD) came to raise an issue of supreme importance, which is that "the degree of progress of civilization in a society is bound to summon into existence patterns of culture able to be expressed by virtue of the progress it attains which is similar in type and level. However, it is true at the same time that the intellectual progress, and the cultural in general, when it supersedes the rhythm of the development of civilization in a society, works at pushing the movement of evolution, the physical and the related to civilization, and elevate it, as often as it foresees new forms of social life and raises all ways and means leading to it" (The Fifth Development Plan, p. 375). Therefore, the desire and concern for the preservation of the national identity of the Kingdom with the Arab and Islamic orientation, is achieved through linking the cultural life to the public life, and the entry of the cultural development functions under the umbrella of the overall development. The Fifth Development Plan deems that culture is essentially the responsibility of the individuals not the State; the State provides services, overcomes obstacles and provides support, while the individuals are the ones who produce and change their choice mode of production without default or directing, and this is what the Plan considers another guarantee for the continuation of development in the field of cultural production. What we have to understand well is the nature of the cultural infrastructure in its form and levels through three orientations; the first of which depends on rooting, the second on the contemporary, and the third is represented in the outputs of merging between the first and second orientation, so that not to lose its identity by looking to the contemporary and the renewable achievement only, and nor it opts for stalemate in what is local and old only, as this matter needs balance and wisdom in terms of heritage on one hand and of the world culture on the other hand.

The Fifth Development Plan has touched on the concept of heritage and its relationship to the overall development. It stated that "heritage is originality and tradition and roots, and our Arab and Islamic heritage is what gives the contemporary culture its unique identity and endowing it with the ability to withstand attack or undesirable influences... however, this heritage is only one of many sources of the contemporary culture, and should not have a duplicate picture, it is made by human beings like us, and came as a result of social and economic breaching conditions, and the product of a degree of awareness that differs from our gains; it is unwise that the era gives up the gains of human data for the sake of loyalty neither to imprison itself inside the past executively, it is obligatory to seek heritage service not only uphold it as it is, but to take advantage of it not just display it in the modern museums, and open to the service of all scientific and academic capabilities and experiences, and to

simplify from it what can be instilled in the minds of the youth for the permanent communication with the origins so as to preserve the integrity of the language." (The Fifth Development Plan, pp. 376-377). As regards the world culture, it is important for our national culture to have multiple cultural sources and that the experience is the base for choosing the new. Thus, the concept of culture today is not limited to the culture of the elite, but extends to include behavior, customs, traditions and social trends, which requires distribution of the cultural activities to many actors making multiple ports for culture which in turn give diverse outputs and have reputation at the regional and global level, the visual and the read and heard levels. Furthermore, the Kingdom has been able to contribute significantly with distinction in several local and Arab cultural festivals, the most important of which is the National Festival for Culture and Heritage (Janadriya) which achieved an excellent reputation in the local and regional cultural media. This is beside the excellence of Saudi culture in many areas which we have no space to mention here. In general, the Plan has focused on setting up initiatives to promote culture through the support of the literary authorship, the distribution of libraries and to accustom students to take advantage of them, the establishment of museums and preservation of the historical sites and taking care of them, the promotion of the tangible and intangible aspects of the national heritage, the exchange of cultures between the Kingdom and other countries, continue exploration of the archeological sites, the establishment of protected areas, promotion of raising the level of the cultural excellence through the individual and the group, planning for further development and providing cultural activities with creativity in them.

The Sixth Development Plan (1995 AD – 2000 AD) stated clearly and definitively that culture has received during the recent decades a very great attention at the global level in general, and in the Gulf region in particular, making it play an important role in the formulation of the social conscience and contemporary life and also the future life. The Plan adds that the concept of culture has approached so closely the concept of civilization, and rather it has become intertwined with it, and almost became a one entity carrying the same physical, intellectual and artistic trends. From this point, the Plan was keen to illustrate the depth of the history of the civilization and culture of the Arabian Peninsula with its geographic and non-geographic extensions, where it pointed out that the Arab Peninsula "is located at the crossroads of civilizations and trade routes since prehistoric times, which has made it the home of many history traditions, cultures, arts, crafts and industries that have accumulated through trade exchanges, adjacency, invasions and migrations in a mixture that merged between the sea culture and the culture of the desert .. the culture of the coast and the culture of the interior .. the culture of the village and the culture of the city, in what constitutes in the end – under a well-established umbrella of humanitarian, moral and Islamic values – a unity in diversity and integration in divergence, and this is what promotes the movement of social networking, and deepens the sense of national belonging and loyalty to the nation, and gives our cultural identity its personality and decent presence. Such a comprehensive perspective of culture, with its reflection on the reality of the cultural life in the Kingdom and its facts, has taken into account all the historical background that formed the thrust for the stock of the civilization of the Kingdom, and for all new cultural developments and achievements in its modern history" (The Sixth Development Plan, p. 363). On this principle, two objectives have become obvious; the first is that the culture of Saudi Arabia is an integral part of the Islamic civilization, in religion and manners, such as it is an integral part of the Arabic civilization in terms of language, history and heritage. And on this basis, the culture of the Kingdom must survive always by virtue of history and depth of heritage. The second objective, since

the world is transferring day by day to become a small village, through contact and communication technology and with the flow of information in an unprecedented way, the communication with all foreign cultures has become a basic necessity that must be invested in promoting and supporting our culture on one side, and the rationalization of this openness on the other side. Therefore, the Plan considers the concept of culture necessitates going beyond the traditional concept which gives the impression to the people that it is a privilege of the elite, and that it is specific for writers and artists, causing the culture to isolate from the rest of the society and also its communication with all segments and sectors and interacting with them; culture, as it is a literary and artistic level that achieves the adult ambitions, on the other side it is also a creative need that takes into account the children's culture. Therefore, the culture must be commensurate with the level of the physical achievements of development, and should be a bowl that collects the efforts of all public and private institutions that have to do with culture, which achieves for culture the effectiveness and the advancement of its data. The Plan has proposed policies to enable culture interact and overlap with the development through the preservation of the Islamic and Arab identity in all areas, expanding the horizon of dialogue between the national cultural data and its counterparts in the Arab and Islamic world countries, working to support the cultural institutions functioning in the field of culture and its development with the establishment of the necessary institutions that take account this trend. The Plan has also referred to revitalizing the book movement starting from its authorship to trading within and outside the Kingdom, which requires the support of intellectuals, writers, artists and caring for them. Furthermore, the Plan did not overlook the importance of activating the child culture, and it has proposed the establishment of a public body for literature and arts, as well as an academy of arts, and both have not been established yet, as all that has to do with culture is within the competences of the Ministry of Information and Culture in Saudi Arabia.

The Seventh Development Plan (2000 AD – 2005 AD) has stressed on the role culture achieved during the previous Development Plans in the cultural development of the community in all its spiritual, material, intellectual, artistic and emotional aspects. Then it explained that it became necessary to contact with the foreign cultures in their civilization depth, in order to take advantage of their multiple positive aspects and reject their negative aspects that are not in line with the fundamentals of the Saudi Arabian Muslim community. The Plan has touched in the statistics to a lot of activities, events and festivals, both internal and external, that had to do with culture. This Plan has raised three key issues: 1) The local cultural reality, despite the previous efforts and initiatives of the Development Plans, but the need still requires conducting a comprehensive study on the cultural status by the intellectuals, study and research centers, educational institutions, cultural bodies, publishing houses and all concerned State bodies in order to reach a comprehensive concept of culture in Saudi Arabia that combines the past, present and the future. 2) The world's cultural situation, which requires support from the State to those interested in culture in terms of their responsibilities in the development of the public cultural awareness and guiding the social behavior somehow towards what supports the spiritual and moral values, in a way that makes the community resist the negative influence of the culture of others, whatsoever. 3) The cultural institutions, the Plan has indicated that, despite the development of the cultural services over the successive five-year Plans through the State multi institutions, however, it has become important to all cultural services to be gathered under one institutional body that operates under a comprehensive national plan, and the reason for this is the frequency of developmental achievements and what

they raised of quality moves of the social life in addition to the impact of the changes and developments on the culture. We can say that policies emanated from this Plan are not much different from the previous Plan, but with more expansion. The Plan added the proposal to establish the Supreme Council for Culture and Arts to be complementary to what has been proposed for the General Authority for Literature and Arts and the Academy of Sciences the Arts, which were proposed in the previous Plan. For information, by the end of this Plan and specifically in 2003, culture was affiliated to the Information Ministry to become under the name of the Ministry of Culture and Information. Also, a General Authority for Culture has been created in 2016 that follows the Information Minister, but it is still in its beginnings.

Starting from the Eighth Development Plan (2005 AD – 2010 AD), culture in the Kingdom has become a Ministry by itself that includes Information beside it, as we have already mentioned to become the Ministry of Culture and Information. The Plan reminds of two that leading events that took place in the development of the cultural life in the Kingdom, namely the establishment of the National Dialogue Center, which contains a selection of thinkers and writers and intellectuals, and its importance lies in the consolidation of the national unity and development issues, and the second event is represented in The First Cultural Forum, which was held under the umbrella of the Ministry of Culture and Information, where this event represents a milestone and an evident shift in the institutional character as the cultural affairs have become for the first time under the care of a single institution, having been distributed among several institutions and departments before, and this is what was demanded by the previous Development Plans. This Plan indicates that the cultural event most prominent in Saudi Arabia is what the Saudi Arabian National Guard are doing as from the care of the National Festival for Heritage and Culture, which is the most prominent event in the Arab arena in which participate annually the elite of Arab intellectuals and scholars to discuss and converse about a variety of topics and issues of intellectual and cultural importance on the Arab, Islamic and international arena; the festival is a good opportunity to see the treasures of heritage in the Kingdom, and contributes to rooting folk arts and crafts and old inherited industries. For information, the General Authority for Tourism and National Heritage, which was established in 2000 for taking care of tourism and in 2015 the National Heritage was affiliated to it, is deemed the official organization that is interested in all that is linked to the national heritage of the Kingdom, including the archeological finds. Therefore, we can say that culture and heritage in the Kingdom of Saudi Arabia enjoy institutional strength: as a culture, the Ministry of Culture and Information is responsible for it, and as a heritage, the General Authority for Tourism and Heritage is responsible for it, and as a proactive vision, it is a process that combines culture and heritage here comes the National Festival for Heritage and Culture, which we will talk about in detail later. Nevertheless, we cannot overlook the role of some other institutions in supporting culture each within its own competences, as public education, higher education, national libraries, many associations, provinces and municipalities, as well as the culture of Hajj and Umrah, and the culture of the holy places in the Kingdom as Mecca and Medina, and the feelings of the holy pilgrimage and so a lot of variety of cultural and Islamic heritage and Arab heritage, located in the Kingdom. This Plan has raised a highly important matter concerning culture and globalization, stating that "the culture, in order to play its positive role with the sweeping challenges of globalization, it is necessary to enhance its capacity through the provision of the basic infrastructure in the field of telecommunications and information technology, and the promotion of supporting the cultural products with the quality of competitiveness locally and internationally," so "the

partnership between the State on the one hand and the private and creative sector and intellectuals on the other hand, has to be developed" and also "to promote and develop the cultural exchanges with the foreign communities by various means, such as joint cultural seminars, and entering into cultural agreements". On this basis, the Plan has set up future proposals, of which: a national plan for culture which components are determined according to the needs and aspirations, benefiting from the experiences of the developed countries that have implemented major cultural projects, and also a plan to take care of using the Arabic language and spreading it in the means of communication via the World Wide Web, including the development and invention of new software to attract the attention of internet users.

The Ninth Development Plan (2010 AD – 2015 AD) has expected culture and its associated activities to witness a significant growing development during this Plan and the future Plans, and it attributes this growth in demand not only for reasons related to population increase, but also to the growing cultural and information awareness among citizens and their awareness of the importance of owning information and their passion for having it, especially from the youth who constitute a large segment of the Saudi society, and on this basis the Plan has set up five important issues: 1) The preservation of a national identity and consolidating it in three dimensions, a spiritual dimension, a cultural dimension and a national dimension. 2) Globalization and the cultural identity, where the Plan suggests that, in light of the cultural globalization, it is difficult to control the flow of information, which makes it imperative to work on improving the content of the cultural and informational material and artworks, which requires encouraging the national competencies to participate with their innovations in order to attract attention and to maintain a close relationship between the citizen and the cultural and informational bodies. 3) The development of the individual interest in reading and in the cultural affairs. 4) The scientific culture and orientation towards a knowledge society, and this is consistent with the developmental orientations of the Kingdom towards the consolidation of the knowledge society, which features began through the Eighth Development Plan, and because this cultural theme is deemed one of the emerging development policy issues, awareness of its dimensions must be made with enlightening the community of its basic piers, and this is what assures the close connection between the culture and the economy and society built on knowledge. 5) Translation and the cultural content, the Plan suggests that the cultural wealth of the Kingdom is increasing constantly reflecting the development of the cultural content, both on traditional media as books and the like, or on the digital media and its accelerating development, and also to go forward in the translation, being basic tributaries for enriching the cultural wealth, especially in the field of the scientific and technical culture and the culture of innovation and development.

With respect to the Tenth Development Plan (2015 AD – 2020 AD), we have already indicated that it was not issued in its final form during the preparation of this research, and what has been viewed are the goals and policies specific to it. It has touched upon the movement of the cultural development through activating the cultural work institutions in all its fields and caring for creativity and the creators in the various fields of science, literature and the arts, and supporting the publications and the translation movement, and the production of books, the adoption of a hobby of reading policy, affection to the book and the expansion in building public libraries and to encourage the public and private sector institutions to conduct cultural events and activities, and promote the international participation and cultural exchange.

Appendix 2

THE COMPLETE INTERVIEW WITH SAUDI INTELLECTUALS

1. Prof. Mohamad Abid Bakhotmah²³⁵

Mohammed Bakhotmah believes that innovation in Saudi Arabia needs to be activated by some of the desired ways, especially at the level of the talented, the inventors and generally via university education. First and foremost, innovation is still a consideration in its current state, at the stage of developmental plans and the things that accompany them, such as advertising and statements, therefore it needs real activation to upgrade it from the stage of conceptualization to the stage of action and productivity. The most crucial priority for activating innovation and creativity is to also agree on the definitions of the two terms at the official level, and to reach a convergence of views about them at the scientific and cultural levels. It is tremendously important in a conservative Islamic society such as the case of Saudi Arabia. Accordingly, creativity if not controlled by a definition that suits our society, some would consider it a pathway to “invention” that is a reprehensible Islamic creation which targets the principles of religion and comes with something new that has no roots in it. In fact, “creativity” is completely different. As for innovation, it may produce unfamiliar products or outputs people may think they distort the inherent heritage that is beyond dispute or may open the door to things that are inconsistent with the realities of Islam. Therefore, such individual whims or desires cannot be left to hinder the progress towards creativity and innovation, since they are among the things that are threatening religion. Islam came to lock the doors of backwardness and unlock the doors of sciences, creativity, innovation by religion, and noble ethical traits. As a result, deeply rooted unparalleled Islamic culture and civilization emerged, the most important characteristic of which is belonging to all people and not only to Arabs. Bakhotmah adds that in return there is a very important thing which is the fact that controlling the creative, innovative and design practices in a sophisticated way right from their start would have value added to our progress towards distinction and global competitiveness. On the other hand, this would pique the interests of the people interested in this arena intellectually, culturally and those who are legally aware. The aim would be to keep them away from the misconceptions about Islam, whilst simultaneously protecting them from problems before they explore their interests, since the nature of innovation and creativity is to be directed to society and not restricted to their inventors. In this regard, Bakhotmah hopes that activating the arena of innovation and creativity in Saudi Arabia would be accompanied by motivational works of literature and a media that encourages the spreading of their culture. In this regard, Bakhotmah provides two discouraging examples that face creative and innovative people, they might be told to: “Mind your own business, you will not be able to change the world”. Also when their ideas are bold, they might be told “You have nothing to do with ..” these would be uttered to urge them to abandon their thoughts either out of frustration, or fear or may be a threat.

Bakhotmah believes that slow activation of innovation and the creativity arena in Saudi Arabia despite the encouragement from the point of view of Islam might be due to the “disconnected” vision about them between the decision-maker and the cultural specialties in general and the scientific ones in specific. Therefore, he hopes that this “disconnection” would find a way for communication throughout speeding the process of providing the definitions he mentioned in order for the situation not to be changed,

²³⁵ Arabic name is (محمد بن عابد بن محمد باخطة) (البروفيسور / محمد بن عابد بن محمد باخطة) For his biography, please go to Appendix 3.

due to the rapidness of innovations and their overlaps, leading to shortsighted decision-makers taking decisions that prevent practicing some arts of creativity, innovation and design even before their start. Setting the record straight, would build bridges of interconnection and trust between decision-makers and society in order to feed the arena of creativity, innovation and design in order to make them increasingly accelerate. Bakhtomah provides a wonderful Islamic saying which is a hadith (saying) by the Prophet Mohammad that clarifies the strength of guidance and building trust between the leader and his people regardless of thought processes or queries, the hadith is:

قال أبو أمامة رضي الله عنه: "إن فتى شابا أتى النبي صلى الله عليه وسلم فقال: يا رسول الله ائذن لي بالزنا؛ فأقبل القوم عليه، فزجروه، قالوا: مه مه، فقال: "ادنه"، فدنا قريبا، قال: فجلس، قال: "أتحبه لأملك؟"، قال: لا والله جعلني الله فداءك، قال: "ولا الناس يحبونه لأمهاتهم"، قال: "أفتحبه لابنتك؟"، قال: لا والله يا رسول الله، جعلني الله فداءك، قال: "ولا الناس يحبونه لبناتهم"، قال: "أفتحبه لأختك؟"، قال: لا والله جعلني الله فداءك، قال: "ولا الناس يحبونه لأخواتهم"، قال: "أفتحبه لعمتك؟"، قال: لا والله جعلني الله فداءك، قال: "ولا الناس يحبونه لعماتهم"، قال: "أفتحبه لخالتيك؟"، قال: لا والله جعلني الله فداءك، قال: "ولا الناس يحبونه لخالاتهم". قال: فوضع يده عليه، وقال: "اللهم اغفر ذنبه، وطهر قلبه، وحصن فرجه"، فلم يكن بعد ذلك الفتى يلتفت إلى شيء".

Abu Umama Al-Bahily narrated that a young man came to the Prophet (PBUH) and said: 'O Messenger of Allah, give me permission to commit Zina.'²³⁶ The Companions turned to him and started rebuking him. The Prophet said: "Come closer. " When the young man drew nearer to the Prophet and sat down, the Prophet asked him: "Would you like it for your mother?" The man answered; No, by Allah. May Allah make me protection for you! The Prophet commented, "People also do not like it for their mothers." The Prophet added, "Would you like it for your daughter? " Again, the young man answered negatively. So, the Prophet said, "People too would not love it for their daughters "Further, the Prophet asked, "Would you like it for your sister?" The Prophet received the same answer and made the same comment. The Prophet went on asking about the man's paternal and maternal aunts. The young man's answer was the same and the Prophet repeated the same comment, "People do not like that for their aunts." The Prophet then placed his hand on the young man and prayed for him, "O Allah, forgive his sins, purify his heart, and protect his chastity." Abu Umamah, the narrator of the hadith, said that the young man did not pay heed to any temptation thereafter. (About Islam, n.d.)

This hadith enriches the creativity and innovation arena and provides the person who wants to be a creative and innovative leader with great benefits, such as: 1) The tolerance of the leader, and had the young man not know that, he would not have gone to him. 2) The leader in his wisdom knew that the young man is distinguished with other positive personality traits due to his politeness in asking the question. 3) The leader's ability to control his feelings and mind in dealing with the mistaken person,

²³⁶ "Zina" is the Islamic-Arabic terminology of adultery.

even if the people around him believe otherwise. 4) The way the leader calls the young man to come closer to make him feel safe and then to teach him lessons and give him advice made the young man respond positively. 5) Proving that the emotional way of talking is very important in some cases, and that not everything should be proved with the mind, so to speak. 6) The leader's usage of persuasion and discussion method in the question and the two answers. 7) No doubt that when the leader says nice words to his followers, every one of them would feel happy and this would scale up their spirit and ambition. And in the end, the leader spoke eloquently and briefly within a short time, he did not prolong his advice and did not bring mental evidence or an advice from the Holy Quran or the Sunna.

On one hand, Bakhotmah wants to prove by this hadith that Islam as a religion and the Arab Islamic culture and civilization are full of creative and innovative theories that are based on it without the need to take anything from others with regard to the values of its people. On the other hand, the outputs of creativity and innovation cannot be identified since some of them might be positive from the viewpoint of one person or other societies but negative from the viewpoint of our religion and culture. Therefore, from this hadith, we have to learn how to discuss them and invest in them and not to suppress or prohibit them.

Bakhotmah provides another important creative example from the Islamic civilization and its culture when one companion of the prophet PBUH, Salman al-Farisi suggested to dig a foxhole around Madinah so that the huge opposing army would not be able to reach them, al-Farisi was not an Arab he was only a Muslim, so prophet Mohammad PBUH in the wisdom of the leader did not hesitate to accept the idea and began to implement it, and was the first one to participate in that. Thus, Salman deserved this honorary rank and deserved this noble reward from the prophet because he thought in a way that serves Islam, he was creative and innovative in a way that benefits Muslims. It is evident that after deep contemplation, he did not give up or waver. This once again provides further evidence of how our minds can be incredibly powerful when we think in a logical way, therefore they become productive and creative in the atmosphere of Shura and the environment of dialogue between the shepherd and the folk and in a climate of understanding between the leader and his soldiers. This is the distinctive feature of the Shura environment in societies, environments that attract thinkers and embrace those who have talents and ideas, not an environment that suppresses them and impedes understanding.

Accordingly, Bakhotmah provides his vision in defining creativity and innovation as he says: "creativity depends on generating renewable ideas provided that their receiver will not mock them regardless of their level, whereas innovation is scaling up ideas by decision-makers, leaders and the interested people to become facts and to facilitate all the ways to implement ideas that are being circumvented with the existing capacities and the available possibilities.

Therefore, Bakhotmah hopes that decision-makers and officials in Saudi Arabia would look at Islam as a religion and the Arab Islamic culture and civilization from different angles and think out of the box giving all people the space to come out with ideas, even if their ideas were "crazy" or "opposing" or even those ideas that contradict the Islamic Sharia, in awareness-raising incubators. This means (one should not feel afraid of suggesting their idea no matter what it is" the thing that would create multiple visions in all fields and create ideas and innovations that carry our identity.

After his concise vision about creativity and innovation, Bakhotmah moves to another topic, that since it is important for the youth so it should be among his interests, which is our society's relationship with the developed societies, as he says: "there is a big difference between them and us, because the intellectual and productive golden era of the Islamic civilization had come to an end hundreds of years ago. So, if we want to reduce the time lag between them and us in terms of economy that is based only on financial aspects, then this is nearly impossible for two reasons, the first reason is that the developed countries are not static, they are movable and their movement is accelerating in the era of knowledge, great information and developed technologies. And the second reason is that the developed countries would strongly compete against us if they sensed our desire to revive our past and prove our capabilities, they would even put obstacles in our way, because this is the globalization market, opened to everyone, to the strongest in thought, knowledge and innovation to prove its existence. Therefore, it is wise for us to have special strategies through which we can identify the "track" that we want to be regionally and globally distinctive. As for Saudi Arabia, competing in the current global economy will not benefit us but would rather drag us to the unknown, since all the economic theories around the world are not our invention but we surrendered to adapt to them, they are in fact either capitalistic or socialistic. As proof to this, we have the biggest reserve of oil and the largest number of petroleum refineries in the world and we can even control the prices but still we are lagging behind industrially developed countries, the question is why? Mohammad's answer here is that this is because we did not choose the right "track" to compete globally which is the track of "Civilization Industry" as we had "treasures" of cultural diversity on the religious and civilized levels throughout history. Therefore, if Saudi Arabia could understand the strategic dimension of this civilized "track" and make creativity and innovation among its basic goals first, and its economic goals second, it would find itself ahead of countries with a big time difference and a space that keep other countries unable to catch up with us. Accordingly, youth should know that our real competitive treasure is our civilization and not our global trading economy. Bakhotmah provides proof here by posing the following questions, where were Arabs, the Persian and the Roman states at the time of the Prophet Mohammad (PBUH), and then notably how the Islamic civilization changed and where it reached and spread during its golden eras? That position and that expansion was not due to economy (the economic hegemony of today) or colonialism (colonizing countries and fighting them) but rather because of the civilization of the Islamic religion that was brought by Prophet Mohammad PBUH. Bakhotmah further states that historians did not mention to us that Muslims were building castles to protect their state but we find castles in other civilizations. So, we have to reflect on this and on other things, what is the significance behind them?! Briefly speaking, the path of competitiveness through the Islamic civilization and the Arab Islamic culture is paved before us, but we might underestimate and resist choosing it believing that money is everything! In this regard, Bakhotmah provides an example about Japan in which he lived and worked as a doctor, that we find the method of development that the Japanese adopted and their national mentality are based on its special civilization and culture, so a society can never collapse as long as it is holding on to them in a healthy way, and keen on always activating them, as he says: "culture is the fuel that generates energy which leads societies to reach their goals". Therefore, we are deeply in need of using our real fuel resources which our Islamic religion and its civilization given to us, and to explore the wonderful cultural systems in it. As for the other natural resources – the most important of which is oil – we will harness it in a creative and innovative way through our culture

because Islam and its civilization is a reference that cannot be changed by time. But we can take endless ideas from them, for example the forbidden things in Islam created a system of creative and innovative ideas. One example is that it is not allowed to draw man and animals especially in worship places, the thing that made Muslims take alternative artistic paths is composed of the overlapping of engineering lines in a perfect way and design the most beautiful Arabic letters and create multiple methods for writing them, and the most exciting thing is the use of abstraction in making the plants visible. Prohibiting wine also made Muslims make other types of hot and cold drinks. Bakhotmah describes the things that are forbidden in Islam as the two yellow lines on both sides of the street as they were designed to create a feeling of concentration on the road and make us drive vehicles with a feeling of comfort and reassurance.

Bakhotmah stresses that economy in its capitalistic or socialistic concept is not our path if we want to compete in the 21st century, because economy for us should be a means not an end, as decision-makers in Saudi Arabia should give the academic people, the educated, employees, craftsmen or business people who are creative and innovative and have the competence, the ultimate and unlimited trust. They are the people through whom Saudi Arabia would draw the map of the future which it likes to see itself on if it activates its civilized and cultural aspect.

Bakhotmah says that America is a strong country not because it is wealthy but because it allows others to be wealthy. That is why the existence of America is based on this culture. Therefore, they are encouraging the competent people there; they are even bringing them from countries around the world, because they are the founders of its economy and its theories. In other words, they are the human brain of the zero point from which America starts to build its culture and they are also the reference on which it measures its development. As for Saudi Arabia, the cradle of Islam and the land of civilization, our zero point should be our Islamic religion and its ethics and civilizations and it should also be our reference on which we measure our development. There is no other method for us but this one and the competent people who believe in this principle are hundreds of millions of Muslims on earth.

Bakhotmah commends the cultural awareness in Saudi Arabia at various levels but this awareness is still mostly visible through festivals, celebrations and evenings, namely, the things that on one hand should be changed to projects that support creativity and innovation and to the diversity of education and economic domains on the other hand. This is because Islam and Islamic civilization and Arab culture that the Arabian peninsula is endowed with from the Levant in the north to Yemen in the south, and from the red sea in the west to the Arabian Gulf in the east, deserve to be the inputs of a real setoff for the competitiveness of the kingdom at the level of the world. Bakhotmah provides an example about the museums in Europe, which parents find to be the suitable places for their children as a source of inspiration for their energy, and source of information explaining to them where they were in the past, where they are now, and where they could be in the future. Therefore, Bakhotmah hopes that the current Saudi generation and the coming Saudi generations could find innovative and creative references similar to those in the developed countries but having our own religious and cultural identity as the thing that would boost their real sense of belonging and not that it is imposed on them, and so the future generation would also not believe that creative and innovative ideas and inventions and their implementation can only be achieved through traveling abroad, because as we mentioned the area of the

kingdom is so vast and its geography is different and its culture is diverse, therefore it is ready for activation. However governmental and private initiatives are not up to the ambitions of the youth and the requirements of the age of knowledge and great information. Then, Bakhotmah raised a question, what do we need in order to start? There are great capacities, creative minds, wonderful cultural diversity and one mutual religious bond among all Saudi people?!

Bakhotmah describes Al Janadriyah cultural and heritage festival, as the most distinctive annual event in Saudi Arabia spanning across three decades, but till now it did not take its role to be a permanent fabric that interacts with the daily life of the society, it is still unable to activate the material and moral historic, cultural and heritage treasures of the Arab peninsula in competitive initiatives. Therefore, it is critical that it should be transformed into a productive global and cultural project at least to say to the world, look here we are, we were a great civilization before we had petroleum, we know how to live and be productive, and we were happy. Bakhotmah also believe that Al-Janadriya is qualified to be a distinctive headquarter for researchers and scientists, for teaching students, and a center for historical learning information about the civilization, culture and heritage of the Arab peninsula and how it interacted with people throughout the eras. More importantly, it is a place to determine whether there are creative ideas to be utilized and invested.

At the end of his speech, Bakhotmah pointed out to the fact that our future is in our religion, civilization and culture, and that the cultural persistence and its development for our peoples are the things that create the economic abundance and not the opposite as the cases of other peoples. We should be aware of this and not to be like that man who tied the crock of gold to his body and jumped into the sea to save the crock of gold that he collects not to save his own life. Therefore, Saudi Arabia should not restrict itself and its ideas to collecting money or seek competitiveness at the level of the world in order to reach an advanced rank based on money. But it should have its own different ways in making money through building trust in the generations and supporting the qualified and competent people and creating endowments in all scientific, cultural, industrial and entrepreneurship domains and not to restrict them to religious matters. Decision-makers in the Saudi government should also motivate the private sector to open competitive areas based on the items that we mentioned above through good examples without forcing them or convincing them that this is our real competitive message that would bring us the treasures of the world. Moreover, the culture of the biggest petroleum company in the world (ARAMCO) should also harness petroleum for creativity and innovation instead of extracting it and selling it at the lowest prices, because oil for us is our modern culture which Allah endowed us with, so our goal should not be money but it should be a means to countless ends.

2. Prof. Yasser Abdulrazzag Balila²³⁷

Owing to his extensive experience, Yasser Balila refers to the fact that specialties of design in Saudi Arabia are connected with labor market rather than being consistent with creativity and innovation, and this is due to the worries about the new specialties. However, he finds that with scholarships and students traveling abroad, the space has become more open and daring in studying new specialties of design that might be factors in providing new specialties for the local market.

²³⁷ Arabic name is (ياسر بن عبدالرزاق بن محمد بليله) For his biography, please go Appendix 3.

Balila strongly supports the idea that linking creativity and innovation to culture and heritage is something vital for a country like Saudi Arabia, where Islam originated and spread, not only as a religion, but also as culture and civilization. Balila refers to the existence of vast heritage of culture and traditions in Saudi Arabia, but that perhaps they did not find the appropriate environment to emerge as innovations. This goes back to the concern about other domains, which are at the levels of individuals or of community. Balila hopes that the new related associations will pay attention to this domain. One such association is founded by a Princess and it is primarily concerned with material and non-material heritage. Another example of a supportive association is that of the Commission of Tourism and National Heritage which is headed by Prince Sultan bin Salman (the son of the current king) who supervises the development of industries and old crafts. He has also established an Award for Urban Heritage in his honor. These are two examples that clarify the existence of steps towards activating culture and reviving heritage.

Balila refers to the proverb that says, "When you do not develop, you age." This means that when a person gets older without achieving anything, it will be more difficult to start. Thus, he sees that activating creativity and innovation should be strong and at a fast pace. He also says that Saudi universities had their views in this respect, and they wonder about giving students extra courses with content based on activating innovation or activating innovation internally within the courses in the general and the specialized curriculums. Regardless, Balila emphasizes that the doses of activating innovation should not be delayed, and they should commence with general education. Later, they become more condensed in university curriculums, starting with preparatory levels, and moving to be more profound in the subjects of specialized levels. This could be aided by the knowledge revolution and the amount of information contemporary to the current generation. Their vast amount and the facilities in obtaining them cannot be compared with the previous limitedness and difficulty in obtaining them. Nowadays, the youth needs more effort and patience at work because effort is something that is inevitable. Affording materials for competition can be an easy task; however, translating that into international and scientific awards is not as easy.

After that, Balila touches upon an essential topic which is that the labor market exports non-Saudi qualifications for some industries and crafts that are originally part of our culture, but were unfortunately not developed. As a result, they were abandoned, and later they were developed in other places as crafts and manufactured as products. This includes the works of stained glass, plaster, Al Sadu, metalwork, carpentry, and types of food. This in itself needs to be explored thoroughly since the income of these works is not only economical, but also cultural and civilizational. As a matter of fact, when they are taught and developed, many of these authentic cultural and heritage data generate other ideas that are suitable for the modern life and consistent with the local market. Most importantly, they give an untraditional and strong boost to improve and develop the country. Therefore, activating creativity and innovation in this domain and in others is directly accompanied with a growing movement in development that is naturally reflected on society's outputs, without specialist obstacles. Balila gives the example of the Annual Saudi Students Conference for university graduates (the sixth conference). The innovation axis included many students whose specialties are not related to innovation in its common sense. Some of them had their innovation in different specialties, and others had theirs as a result of collective work or as a result of amalgamating more than one specialty. In general, this indicates a positive and constructive orientation not at the level of ideas and products, but it is an indicator that

clarifies the importance of ongoing bids, collective action, and self-education. Thus, more attention should be paid to these seeds, and they should receive heavy support, materially and emotionally in order for them to be the real competitive future for the Saudi Arabia, culturally and economically.

Balila further states that every society has a history and wide culture, and it is proud of them as a civilization before it reaps economic benefits from them. When a society is aware of its culture, it revives the past respectfully and then adds to it an innovative touch that fits the present time. In its turn, the present transforms the past of the future, and another innovative item will be added to it. This will be a proper innovation that considers the intellect and the age, with creative continuity that reserves historical chronology for generations. In this way, the bid is sustained by reserving the origins as a resource, and keeping development or supplement as a norm for permanence. What should be taken seriously is the unfortunate assumption made by new generations, that the past is an old, archaic and expired thing. This is the opposite of the beautiful mental image that exists in the minds of our generation and the previous ones. However, most of the modern generation's members learn through their study that some current civilizations are a continuation of their past culture and heritage, which they reserved and added to. Balila thinks that the speeches and activities about culture and heritage that the current generation receives do not correspond with the vocabulary of the development spirit and the age of knowledge and technology in which it lives. This requires the involved people to change the speech and traditional ideas, and to elevate them out of the box. This makes them part of the patterns that interact with the mind of the new generation and proves that heritage does not hinder development or demands the abandonment of the modern. It rather helps in giving a competitive spirit and identity to what is modern. This responsibility primarily falls on the group that believes in the importance of culture and heritage as platforms for creativity, innovation, and design.

Balila comments that the responsibility of this idea is a rather massive one, and this generation can be more connected with it through the types of electronic devices it has. Thus, it is inevitable to activate festivals and big cultural and heritage occasions in order to have a more variable role with better understanding of the needs of the present generation. For example, Al-Jenadriyah festival is the largest measure of culture and heritage in Saudi Arabia, and it is sponsored directly by the King. There are other measures on the levels of regions and cities, some of which are scheduled, and others are of individual effort. Nonetheless, they should be taken into consideration because today's generation is cultivated and educated, and it understands the importance of responsibility when convinced of it. The question is how to convince it of responsibility? Here comes the role of shaping patriotism and identity through innovative interaction between the old and the new.

Towards the end of the interview, Balila highlights two points. The first one is that cultural products have started to diminish, not because they no longer exist, but because they were taken abroad by tradesmen for the purposes of wholesale manufacturing and sell them at cheapest prices. Thus, they can earn money without considering the damage that might be caused to the cultural and civilizational system of the country, in addition to rising unemployment rates and the loss of many opportunities. The second point is the importance of the government's support, and the encouragement to transform some festivals and occasions into integrated projects based on research, science, and production. This helps in activating our heritage,

cultural, and civilizational reservoir to become a creative mentality towards sustainable economy. He sees that the National Festival of Heritage and Culture (Al-Jenadriyah) might be the seed for an idea of a project that falls in this domain. However, it needs to be developed through various axes that make it an example which reflects the fundamentals of creativity, innovation, and design through an untraditional mentality. After all, the ideas originating from open minds will subsequently be received by open minds. The Ministry of Saudi Arabian National Guard that supervises the festival proved that it is an establishment with a creative mind despite being a military one. It excelled in many healthy, intellectual, and social activities. Balila certainly wishes that Al-Jenadriyah Festival would witness a paradigm shift, and evolve after three decades of success to become more than a mere festival that receives visitors for two weeks and then closes its doors to all the buildings and equipment inside. The festival has enjoyed so many good memories of its success in the past three decades, and there is nothing negative that can be said against these two weeks, however being the product of a huge national project that works all year round, and that is based on culture and heritage in domains of research, education, and economy would be a welcome evolution.

3. Dr. Tarek Ali Fadaak²³⁸, Prof. Abdullah Mohammad Al-jughaiman²³⁹ and Mr. Saleh Hassan Al-afaleq²⁴⁰

Saleh Al-afaleq says that the strategy of knowledge-based economy has not yet been activated in Saudi Arabia. He continues by saying, some officials in some of the relevant sectors do not know how to shift to knowledge economy, and others have a false perception of it. He adds that there are some attempts to take the initiative in relation to this type of economy, but they are rather feeble attempts.

Al-afaleq believes that there are two reasons behind that: the first reason is the fact that the private sector's environment is not free enough to serve this kind of economy. The second reason is that there are no strong initiatives from the government to sponsor this kind of economy which should be administrated by the private sector and encouraged and supported by all governmental establishments. Being the case, so, it is difficult to give an example of an initiative in the private sector that took the lead in this domain.

Abdullah Al-jughaiman adds that until today, there is no real knowledge economy or society despite the existence of three strategies, with three sectors in charge of activating them. These strategies are: 1) By the year 2032, the Saudi people will have become a knowledge society, and this is one of the responsibilities of the Ministry of Economy and Planning, 2) By the year 2020, education outputs will have become based on talents and creativity, and this is one of the responsibilities of Mawhiba Establishment, 3) By the year 2025, economic diversity will have become based on science, technology, and innovation, and this is one of the responsibilities of King Abdulaziz City of Science and Technology. Al-jughaiman says that there is no strict commitment to these strategies, and they do not function in accordance with the huge amounts of money allocated for them or as planned. For example, the science and technology plan is the one that was activated the most but in a way that does not go in line with the billions allocated for it. Moreover, no one has been trained on the other

²³⁸ Arabic name is (الدكتور / طارق بن علي بن حسن فدعق) For his biography, please go to Appendix 3.

²³⁹ Arabic name is (البروفيسور / عبدالله بن محمد بن أحمد الجغيمان) For his biography, please go to Appendix 3.

²⁴⁰ Arabic Name is (الأستاذ / صالح بن حسن بن عبدالله العفالق) For his biography, please go to Appendix 3.

three plans. Unfortunately, we make plans on paper without considering our abilities or providing the necessary support.

Al-afaleq confirms what Al-jughaiman has said, and he adds that this cannot be applied if there are no stable views and plans upon which there is an agreement directed to a unified collective project.

Tarek Fadaak says that in the Kingdom, we have generally dealt with the plans as the “ball” in the field rather than the “team” and the “plan of the game.” Instead of plans, we might need programs to be applied and finished with, and others to be achieved, and so on.

Al-jughaiman adds that one of the most important factors of the success of knowledge-based economy is a completed infrastructure in all its domains and research centers that spread in the public and private state establishments, and the sustainable generating of innovation, inventions, and qualitative and scientific research. Furthermore, the state should have technical and scientific products that it can sell abroad. This system should be linked to the private sector in its broader sense. Thus, the ideas will be in both ways: as study outputs that can be marketed and that benefit companies and factories, or as suggestions that need more study and innovation. Al-jughaiman adds that all research centers exist currently in universities, which is what makes them isolated from the manufacturing sector.

Fadaak clarifies a very significant matter; unfortunately, the academic sector has not offered strong outputs in the domain of intellect and innovation that help and encourage factories or companies to adopt them. This means that most researches are ordinary ones and do not attract attention. To prove that, Fadaak draws attention to a very important indicator that should be taken into consideration; i.e. the cognitive value of these researches which can be judged by using them as scientific references. However, they are unfortunately not in demand. Fadaak says that this situation leads us to directly or indirectly conclude, that our scientific domains are limited. This indicates that the researches we produce are also limited, and they do not attract readers’ attention whether on paper or electronically; this is the view from one side. On the other side, our researches are directed only to pedagogical issues, and this means that the aim of most researches is to get a promotion rather than the actual value as a scientific research. What proves this assumption is the rarity of research production of a faculty member when she/he rises to the rank of a professor. In the near future, there are no steps to change this situation; it is becoming more complicated, because of the dependence of some universities on people from abroad to conduct these researches on the pretext of mutual scientific cooperation. Fadaak adds that the value of researches can be measured on three levels: A level that reaches generating ideas and innovations, and this is the highest value in scientific researches; after that comes the researches that consider applied processes, and then the general level, which represents the researches that reaches those who need them for one reason or the other. Thus, Fadaak says that if we think about this situation responsibly, we will find that the culture of creativity and innovation is still unfound, and it needs great efforts and tireless pursuit to activate them.

Al-afaleq comments that there are two things in relation to activating researches. The first one is that the research departments have a direct connection with beneficiaries of factories and companies. In this case, guidance is both direct and economically beneficial. The second thing is that researches are connected with direct economic

issues that concern the country at a first stage, and at a later stage they concern the public.

Fadaak comments that the previous method of connecting researches with issues of economy and innovation used to take a long time due to many reasons. However, nowadays this connection has become accelerated, and it does not afford any delays! Moreover, the time span between the invention and its application used to be a long one, but now has been reduced to a time span of no more than a few months. Fadaak provides the example of the navigation system that is used to determine the location of planes. In the past, it used to cost huge amounts of money, and it used to be provided with data only through American bases around the world, a process of 20 minutes. Now, this system is available in mobile phones and cars, and it does not require having a license or contacting bases or other things, and this is what is currently known as GBS.

Al-jughaiman comments that without a doubt, we are globally very weak in innovation and invention, but on the level of the Arab World, we are the best since we rank the highest. He adds that those interested should pay attention to the defining differences of creativity, innovation, and invention. Creativity is the way of thinking that may lead to innovation or invention. Innovation could be the process of developing an already existing thing or making a brand-new thing such as a product, a service, or a process. This innovation can aspire to the level of an invention when it is officially registered for the first time.

In conclusion, Al-jughaiman hints that if we compare the innovations area to that of knowledge economy, we find ourselves still backward on a global level. However, on a regional level we can be good, but still not satisfactory. Al-jughaiman adds that the reason behind such a level is that most patent outputs in Saudi Arabia are from Aramco and SABIC companies which are dependent on oil.

Al-afaleq comments that the Kingdom has invested in two domains. At the beginning it had investment in the oil domain, and later it was in the domain of petrochemical industry. This investment is not heterogeneous; it is rather in the same domain although Saudi has bigger capacities. Al-afaleq refers to an essential point; this orientation proved that economy is what stimulates innovations and inventions not vice versa. This hinders the ability of innovation in transforming to other sectors that serve other equally important domains such as the industry of goods, cars, spare parts, etc. People might ask about the benefit of that. These industries are available in many countries, and it is useless to start from scratch while others are way more advanced. Moreover, it is also possible for us, for example, to bring car parts and assemble them, and then say that we manufactured them — Al-Afaleq comments on such inquiries that they prevent the country from developing and diversifying its economy. The orientation of knowledge proves that relocating a specific industry encourages opening the space for industries in other domains, until we reach an integrated manufacturing sector. Al-afaleq gives an example of a group of young people who gained great experience from the petroleum industry; they gathered so much experience that was transformed into initiatives, and his wish is that they will be supported to reach a global level.

Fadaak refers to a very important issue; the administrative method that deals with innovations might kill plenty of them since we do not know how to deal with them, or we do not allow them the chance of completing their cycle and reaching the end. From

another side, some innovations might be small in the beginning, and they might need to be left in order to develop into big pioneering projects. However, our limited experience in this domain hinders the process.

Al-afaleq continues that our problem lies in the fact that we let economies direct innovation and invention, and this leads to serious failure in their development and diversity. One of the reasons behind that is the type of economy and the source of funding. 90% of our economy in Saudi Arabia is based on oil, and that is why we find most of our innovations and creativities, rare as they are, revolve around this domain. They are mainly of the outputs of companies or universities that are concerned with this economy such as Aramco Company or University of Petroleum and Minerals. Both of them are specialized establishments, and their inventions are similarly specialized. The layer based on the current economy might find no problem in that, and we respect all viewpoints. However, Saudi Arabia is a country of a large space and with the fastest population growth rate. Thus, diversity in economy and innovation should be a basic option to maintain the sustainable developmental system. If we look at other sectors such as the consumption one (spare parts as an example) we do not find innovations or inventions. Moreover, we are one of the largest countries in seawater desalination, and this is a big achievement. So, it goes without saying that we have integrated industry in this domain, and even integrated systems of innovation and invention. However, unfortunately, we are still importing the spare parts of such plants from abroad though most of them depend on oil. As Fadaak says, we are one of the largest consumption markets of baby diapers. However, to date there is no innovation related to this in our society. It is easy to link that to many other consumables where we could have been the best innovators and inventors through the ideas of our youths who represent the largest layer of our people, and many of whom have their studies in the best international education institutes, that is a factor that distinguishes us from others. Al-afaleq says that in other words, we do not have industry that corresponds with our consumption.

Fadaak touches upon another significant topic; the Open Market played a role in decelerating innovations and inventions in our society since we have opened the space for import, and we brought everything from abroad. This is why we might need radical change in our consumption behavior. Moreover, we need to change the mentality of our simple procession towards innovation and invention.

Al-afaleq comments and refers to the fact that this issue is also related to creativity, which is also at a low level. It needs a strong push forward since it is the main key for innovation, invention, and design when it comes to our culture and its effect on the aforementioned axes, especially in activating knowledge economy and its interest in innovation, invention, and design.

Al-jughaiman adds that the creativity to which Al-afaleq has referred to is strongly connected with culture. When it is activated, culture has so many creative outputs that are able to generate varied innovations and inventions since it is connected with our daily life details. It is even one of the beauty sources that evoke determination and development. One of the most important issues in relation to culture and its creativities is based on originality. For example, cultural heritage is something original, but so many people have considered it as something archaic. Now, we find that it is being revived in one way or another in order to reveal its originality in accordance with its time, and so on. Thus, creativity is connected with this cultural chain, and accordingly, each new output is carefully based on the culture of a certain community since it

expresses its originality in one way or the other. This does not necessarily mean that originality is something stable! In other words, what we find original here can be of a different value somewhere else since it might not be connected to the culture from which it originated, and vice versa. As a result, we should admit and acknowledge that the cultural side of societies is of utmost importance in activating creativity through which we reach innovation, invention, and design.

Fadaak agrees with Al-jughaiman, but he prefers to call culture (al-thaqafa) as civilization (al-ḥaḍara). There are a lot of "al-ḥaḍara" that support creativity and innovation, and the Islamic one is among them. Islam encourages the human in general, whether a Muslim or not, towards achievement and progression, and it always pushes them to optimism. For example, a Muslim is required not only to read Qur'an, but more importantly and basically to understand it and live accordingly. From another side, they are also required to discover its never ending novelty. This is enough to prove that "al-ḥaḍara" (culture/civilization) might be a good entry for our progression, and this is what our ancestors did, they gained the highest position in sciences and knowledge for hundreds of years during the period known as the Golden Age.

Al-afaleq affirms his positive response to the importance of culture in knowledge-based economy and what accompanies that of creativity, innovation, and invention. There are attempts and initiatives, but they do not aspire to the necessary level. He describes our culture as one that is unfortunately limited to sporadic periods and eras. Al-afaleq says that one of these initiatives is the architectural heritage initiative which is supervised by the Commission of Tourism and the Ministry of Municipal and Rural Affairs. There are also initiatives by individuals. The important thing that Al-afaleq refers to is that nowadays, environment and development in Saudi Arabia need to take culture and heritage as their distinguishing axes to support knowledge economy, creativity, and innovation there. Religion and culture are internalized in people's consciousness, and the issue needs an intelligent beginning. The government does not have stimulating ideas in this respect, but at the same time, it does not have the obstacles that used to exist in the past. I am not exaggerating when I say that the most important rule in activating such an axis is education, coaching, and training.

Fadaak adds the following philosophical and pleasant inquiry at the end of the discussion. What are the threats of our strong engagement with innovation? And what are they if we do not innovate? He promised to discuss this issue with us after I finish my PhD thesis.

Appendix 3

THE INTERVIEWER'S BIOGRAPHY

البروفيسور / محمد بن عابد باخظمة

Prof. Mohamad Abid Bakhotmah

The interview was conducted on: Thursday, February 11, 2016, Jeddah, Saudi Arabia

Biography:

Mohamad Bakhotmah is a professor of surgery at the Department of Surgery, the Faculty of Medicine and University Hospital, King Abdulaziz University, Jeddah, Saudi Arabia. He is a liver and gallbladder surgery consultant in Jeddah, Saudi Arabia, with diverse research and educational initiatives in the fields of surgery, jurisprudence, quality assurance, professional ethics and journalism. He has participated in numerous supervisions of charity institutions and has authored books on Saudi cultural affairs. He is well known in Saudi Arabia as one of the founders of the implementation of jurisprudence in medical practice. Prof. Bakhotmah also has a written philosophy on the difference between (*Culture as Boom*) and (*Culture as Renaissance*). He values the notion that a country should benefit from its previous experiences to create its cultural model. He is very proud of the future of the Islamic civilization and jurisprudence-based innovation, e.g. his philosophy on the medical dress for the female patients to respect their privacy during the preparations of surgical operations and post-surgery recovery, and the importance of enacting a law preventing DNA fingerprinting from being conducted except through a court ruling and a central government laboratory with step by step documentation.

البروفيسور / ياسر بن عبدالرزاق بليله

Prof. Yasser Abdulrazzag Balila

Interview conducted on: Saturday, February 13, 2016, Jeddah, Saudi Arabia

Biography:

Yasser Balila is a professor at the architecture department, the Faculty of Environmental Design, King Abdulaziz University, Jeddah, Saudi Arabia, where he also served as a dean of the same faculty. Prof. Balila was the Vice-President of Taibah University for Graduate Studies and Scientific Research and then became Vice-President for Development and Quality, Madinah, Saudi Arabia. He was also appointed as the first advisory dean tasked with setting up the College of Art and Design for girls at the University of Princess Noura Bint Abdulrahman, Riyadh, Saudi Arabia. Prof. Balila's professional teaching and activities are primarily, Visual Communication, Design Analysis, Traditional Architecture, Acoustics & Illumination in Architecture, Environmental Control Systems, Construction Technology, Project Management and Architecture Design Studios. He has numerous social activities and committees' memberships. He has published many scientific papers and supervised masters and PhDs. Prof. Balila obtained his Ph.D. from the School of Architecture and Building Science, University of Liverpool, England - 1987.

Dr. Tarek Ali Fadaak

The group interview was conducted on: Tuesday, February 16, 2016, Riyadh, Saudi Arabia

Biography:

Tarek Fadaak is an associate professor and a city planner at the city and regional planning department, the Faculty of Environmental Design, King Abdulaziz University, Jeddah, Saudi Arabia. He is currently a Member of the Saudi Parliament (The Shura Council) and was also a former Chairman of the Municipal Council in Jeddah, Saudi Arabia. He is a Member of the Board of Directors of Okaz Organization for Press and Publication and enjoys the memberships of numerous international professional associations such as the American Institute of Professional Planners. Dr. Fadaak has published several research articles and lectures and also publishes a weekly column in the Okaz newspaper. In his academic career, he has participated in numerous supervision and arbitration processes. Among his many accomplishments, Dr. Fadaak is a licensed pilot and a former Fellow of the Graduate School of Design at Harvard University. He is a co-author of "One Planet," a documentation book on the story of the first Arab- Muslim astronaut experience in space. Dr. Fadaak obtained his Ph.D. in Urban Studies with first honors from Portland State University in America he proceeded to go to Harvard University for Advanced Studies in Urban Planning and Housing. Additionally, he has also studied in the field of computer use in the planning and study of airport systems, Massachusetts Institute of Technology.

Prof. Abdullah Mohammad Al-jughaiman

Group interview conducted on: Tuesday, February 16, 2016, Riyadh, Saudi Arabia

Biography:

Abdullah Aljughaiman is a professor at the Education College in King Faisal University, Saudi Arabia. He is currently a Member of the Saudi Parliament (The Shura Council), and the President of the International Research Association for Talent Development and Excellence (IRATDE). He previously served as the Dean of the Research and Consulting Institute, as well as the Director of the National Research Center for Giftedness and Creativity at King Faisal University, Saudi Arabia., Prof. Aljughaiman's professional primary focus is the development and education of gifted and talented students. He has published books, co-published some, and has peer-reviewed articles on the identification of and services for gifted children. Prof. Aljughaiman has received multiple awards for his professional and administrative work in Saudi Arabia, United Arab Emirates, and the USA. His research and practice have been supported by funds from King Faisal University and the Ministries of Higher Education, Education, Planning of the Kingdom of Saudi Arabia, Hamdan Award for Excellence in Education (UAE). Prof. Aljughaiman obtained his Ph.D. in the programs of caring for the gifted and the development of thinking, a qualification he earned with excellent grades and honors from the University of Idaho, USA - 2002.

Mr. Saleh Hassan Al-afaleq

Group interview conducted on: Tuesday, February 16, 2016, Riyadh, Saudi Arabia

Biography:

Saleh Al-afaleq has held numerous professional positions, among them: CEO of Al-Kifah Holding Company and its subsidiaries from 1995 to date, Chairman of Al-Ahsa Tourism and Leisure Company (Ahsanah), Vice Chairman and Member of the Executive Committee of Al-Khabah Financial Company (licensed by the Capital Market Authority) Managing Director and member of the Investment Committee of the Capital Management House (licensed investment bank of the Bahrain Monetary Agency), and is a member of the Board of Directors of Noor Capital (licensed investment bank of the Emirates Central Bank). The number of memberships he holds extend to a number of fields, among them: Chairman of the Board of Directors of Al-Ahsa Chamber of Commerce and Industry, Chairman of the National Center for Palm and Dates, Member of the Council of Saudi Chambers, Member of the Board of Directors of the Industrial Estates Authority, Member of the Board of Directors of the Civil Aviation Authority, Member of the Municipal Council in Al-Ahsa, Chairman of the Committee on Community Service in Al-Ahsa, Vice-Chairman of the Committee of Friends of Patients in Al-Ahsa, Chairman of the Council. He is also the founder of the Hassan Afaleq Center for the fight against smoking, supervisor of the establishment of the Center for the control of genetic blood diseases in Al-Ahsa. He has also previously served as a member of the Saudi Parliament (The Shura Council). He obtained a master's degree in human resource development from the University of Seattle, USA – 1990

Appendix 4

THE QUESTIONNAIRE RESPONDENT'S COMMENTS

comments	
1	شكراً لتفاعلكم ونرجو السداد لكم
2	ممتاز
3	وفقكم الله لخدمة الاسلام والمسلمين
4	لم اشاهد المهرجان في حياتي لذلك اقترح ان يفتح في كل مدينة من مدن المملكة
5	اقترح ربطه بالمجتمع الشبابي أكثر ليتحقق احتضان الابداعات الشابة مثلاً دعم رحلات مدرسيه للمهرجان من جميع انحاء المملكة المهرجان الان في صورته الحالية لا يغادر حدود الرياض
6	مقترحات تطويرية من الباحث جميلة وتستحق التبني، نسأل الله للباحث التوفيق والنجاح
7	اتمنى لك التوفيق
8	موفقك يا دكتور، والله يسهلك الامور
9	التفكير لتدعيم التراث ليكون رافد اقتصادي عالمي مبتكر
10	نتمنى التطوير والابتكار، لكن ما يحدث سنويا من تدخل الرجال من ذوي الفكر المتمزمت يعاكس الابداع والابتكار، تحديد مشاركات المرأة وتفاعلها بشكل كبير ينقص التعاون والأفكار. المطروحة بشكل كبير ويحده في التفكير من وجهة نظر رجل، الخوف من ضغط وردود افعال ذوي الافكار الرجعية يقلل من الانتاج الفكري و الفني و يحد من عرضه امام المجتمع
11	بالتوفيق يا أستاذي
12	أتمنى ان يتم تعميم الجنادرية بالروى المذكورة في الاستبيان ع مناطق السعودية كامله
13	● اقترح تغيير مسمى المهرجان بأكمله ليشمل جميع الثقافات المتعددة في انحاء المملكة العربية السعودية ● لما لا يكون هناك مهرجانات متعددة طوال العام في كل منطقة في المملكة فمثلا هناك يكون هناك مهرجان خاص بالحجاز وغيره خاص باهل الجنوب بتفرعاتهم وهكذا ● يجب الاستفادة من نصائح المتقدمين في السن في كل بيئة مختلفة واستنباط افكار تصميميه وانتاجيه تفيد الوطن
14	1. Launch a national design competition focusing on development of creative design solutions based on traditional elements 2. Focus on basic social needs i.e. affordable housing, neighborhood's centers planning, social congregation etc.... 3. Build a complete interactive media solution to raise public awareness & interest 4. Utilize generated interest as momentum for change all year long. Best of luck & Best regards
15	ان يتم وضع آليه معينه للجنادرية بأن تكون مستمرة طوال العام.. بحيث يكون العائد الاقتصادي كبير للدولة والمشاركين ايضا
16	مع امنياتي لك أخي فواز بكل التوفيق وأن ينفع بعملك وعلمك هذا وطننا الغالي إلا أنني وبكل شفافية عملت في جنادرية ٢٦ كرئيسة اللجنة الثقافية في وفد المدينة المنورة ومع سعادتني بهذا التكليف ويطلق على البعض لقب شاعرة إلا أن استمرارية العمل في الجنادرية او الترشيح قائم على العلاقات العامة او الوسائط وليس التراث أو المواهب. ويمكنكم سؤال الأخت العزيزة د. دينا بنت عابد باخطة عن موهبتي وتقبلوا مني أخلص الدعوات والتحيات
17	الطرح الذي تم تقديمه مهم جدا ويجب تفعيل الجنادرية لتكون على مدار السنة وموزعة على ثلاث مناطق وليست منطقة واحدة اقل تقدير او خمس مناطق على اعلى تقدير وتشمل الامور الابداعية والتطويرية والاستفادة من التراث لها وليس العكس
18	لتأكيد ثقافة المكان يجب التطرق الى مجموعة من الانساق منها (المعرفية - العقائدية - السياسية - الاجتماعية - الاقتصادية - التقنية - التعليمية - الترفيهية - الصحية - الفنية - الاتصال - الانتفاع بالبيئة) ومن خلال تلك الانساق يجب دراسة تأثير ذلك على عمران المدينة من خلال رد المعماري الى جذوره الثقافية
19	استنباط معايير تصميمية للمشاريع الحديثة نابعة من دراسة تاريخية للموروثات الوطنية
20	نسأل الله التوفيق والسداد وان يجعل عملك خالصا لوجه الله كما عهدناك وتعلمنا منك استاذنا الغالي

21	اولا اشكرك وأقدر لجهدك في تكوين هذه الاستمارة وهذه الأسئلة الرائعة والمهمة أيدك في كل ما ذكرت و تبحث عنه بهذه الدراسة وأتمنى ان يستفاد منها بشكل ايجابي و سريع، ولكن قد يكون استخدام الموقع بتصميم الاستبانة بشكل اسهل فقد استغرقت مني وقت طويل ولو كانت بشكل جدول او خيارات اخرى قد تكون اسرع وتيسر على المستهدفين تعبأتها بسرعة والا يملوا .إذا احتجتني بأي خدمة فحيك الله عبد الرحمن مجرشي محاضر مبتعث من جامعه ام القرى قسم العمارة الإسلامية الى جامعة التكنولوجيا بماليزيا
22	تفعيل دور الجامعة
23	لا أعتقد بالإمكان لمشروع وطني واحد أن يستطيع حصر كل الثقافات المتنوعة لبلد يتميز بكم هائل من التنوع الثقافي والتراثي كل مجتمع يجب أن يحافظ على ثقافته وتراثه الخاص به وينميه ويطوره في إطار المعرفة الثقافية الخاصة بكل مجتمع أعتقد انه يجب أن يقيم مهرجان تراثي لكل مجتمع يعتقد أن لديه موفور تراثي وثقافي مناسب لا أعتقد أن التراث الثقافي يتطلب تدخل إبداعي أو ابتكاري لأنه خلاصة إبداعات أجيال تراكمت عبر الزمن بل الإبداع والابتكار المطلوب هو التطوير الطبيعي لهذه الثقافات بما يتلاءم مع مجريات العصر مع الحفاظ على الطابع التراثي الثقافي والإبداعي للأجيال السابقة مجالات الإبداع والابتكار التي تساعد على خلق فكر إبداعي وتصميمي متوفرة في جميع نواحي الحياة، والمهرجانات الثقافية هي أحد مصادر الوحي الإبداعي ولكن كما هي عليه وبدون تدخل ابتكاري أو تصميمي تطويري، فالمبدع والمبتكر يستوحي افكاره من التراث كما هو عليه وكما كان عليه سابقا، ومن ثم يخرج بمنتوج جديد يشمل التنوع الإبداعي للأجيال بدون المساس بما كان عليه الماضي .حتما أوفقك الرأي بأن المهرجانات التراثية يجب أن ترتبط بالتنمية الاقتصادية وتطوير مجالات ريادة الأعمال، لذا يجب أن تخرج عن طورها الحالي كمناشئة وطنية حكومية بل يجب أن تقام برعاية الشركات التجارية ورجال الأعمال بعيدا عن التوجهات السياسية والمصلحية الإنتاج والتنمية الاقتصادية هي ثقافة بحد ذاتها فالمهرجانات وحدها ليست كافية وليست المكان المناسب لإعادة صياغة ثقافة الإنتاج لدى شعوبنا التي تربت على ثقافة الاستهلاك، فالتعليم ثم الحاجة للإنتاج وطبعا خطط التنمية الاقتصادية الجادة هي أساسيات إعادة ثقافة الإنتاج لدى شعوبنا .
24	من أعماق قلبي أسأل الله لك التوفيق والسداد أستاذي الحبيب
25	انا لم ازر المهرجان واري ان يقدم الي فكر الانتاج المعتمد على الصناعة والميكنة التقنية بالتوازي مع الحرف اليدوية وذلك لإيجاد اقتصاد صناعي متطور د طارق سنجيني
26	يجب ان يكون من اهداف المهرجانات التراثية رسائل دينية واجتماعية وانسانية للعالم اجمع
27	جزاكم الله خيرا مهرجان رائع جدا نتمنى استقطاب عدد كبير من الشباب والبنات لفهم ماضيهم وتراث اجدادهم وتطوير الذات وزرع الهمة في داخلهم وحب الدين و الوطن
28	حاول ان تكون المقترحات على شكل برامج قابلة للتطبيق، وابتعد عن العموميات قدر المستطاع، لأنني لاحظت الأسئلة يغلب عليها العمومية ٢- لم يتضح لي علاقة الموضوع من خلال الأسئلة بمجال تخصصك وكأنك ابتعدت كثيرا.
29	لم يتحدث الاستبيان عن الرضى عن المهرجان، ولا عن مستوى الطرح الحقيقي للمهرجان عن تراثنا.
30	1- أرى أن يكون المهرجان طيلة العام والاحتفالات تبقى كما هي لمدة أسبوعين. 2- لا بد من انشاء معاهد تدريب متخصصة لكل الحرف في المهرجان والدراسة تكون برسوم لنقل المعرفة للأجيال اللاحقة وتطويرها كالبنا بالطين والخياطة والصناعات والحرف اليدوية. 3- عمل زيارات متكررة لطلاب وطالبات المدارس للمهرجان لمشاهدة ما يتوافق مع ما يدرسون من علوم وفنون واكسابهم مغارف جديدة. 4- تحديد وقت واحد للعاملين في هذه الحرف والصناعات من 09 صباحا الى 04 عصرا مثلا ولمعاهد الدراسة .وشكرا لك على هذا البحث الذي اتمنى ان تصل نتائجه للقائمين على المهرجان لتفعيل ما نتوصل له من نتائج .
31	كافقصادي أرى أن تميزنا ونهوضنا لن يتحقق إلا من واقع ثقافتنا. لا يحسن أن نصبح متكئين على ثقافات أخرى تؤثر علينا بشكل كبير دون أن يكون لدينا أي تأثير عليهم يذكر في مجالات التكنولوجيا الحديثة تحديدا. اليابان لها تجربة في تعزيز دور الثقافة لتنمية الاقتصاد أدعوك لقراءتها .أتمنى لك التوفيق والنجاح الدائمين.
32	شكرا لمساهمتك في رفع قيم هذا الوطن
33	وفقك الله
34	مهرجان الثقافة الوطني هو مهرجان لعرض الموروث و حياة الآباء و الاجداد و كيفية تعايشهم مع وقتهم قبل التغيرات التي حصلت على الوطن بعد الطفرة الاقتصادية و من الضروري المحافظة على هذه كما كانت و ليس تطويرها لتناسب فكرنا الحالي حتى ان افضل تخفيف الاستخدام المفرط للكهرباء و تحويل وقت زيارته لتكون من الصباح الباكر حتى المغرب او العشاء على أقصى حد ليمثل ثقافة ذلك العصر و كيفية معيشتهم ولكي يتحقق هذا ارى ان يسمح للموظف بيوم اجازته مخصصه للمهرجان و يأتي بما يثبت تواجده هو و عائلته في المهرجان بحيث انها لا تؤثر على اجازاته الخاصة لدي الكثير و لكن الوقت الحالي لدي ضغط في العمل

Appendix 5

THE QUESTIONNAIRES RESULT

8/25/2017

Google Forms - دعم الابتكار والتصميم في المملكة العربية السعودية من خلال التراث والثقافة

fawaz.bakhotmah@gmail.com

Edit this form

97 responses

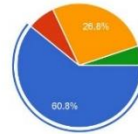
[View all responses](#) [Publish analytics](#)

Summary

الفصل الأول: كيف تقيم مهرجان الجنادرية في وضعه الراهن؟

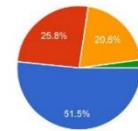
1 هل يحافظ المهرجان على الموروث الثقافي والتراثي للوطن؟

نعم	59	60.8%
لا	7	7.2%
أشك في ذلك	26	26.8%
لا أعلم	5	5.2%



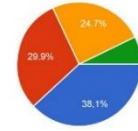
2 هل تعتقد ان المهرجان إضافة تنوع اقتصادي للوطن وأيضاً ساعد ابتكاري على تكوين فرص عمل ومهن جديدة؟

نعم	50	51.5%
لا	25	25.8%
أشك في ذلك	20	20.6%
لا أعلم	2	2.1%



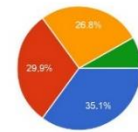
3 بمعنى ان المهرجان يقدم لمن يريد ان يبدع معرفة ومعلومات جديدة؟.. (Creativity) هل تعتقد ان المهرجان فعل الإبداع

نعم	37	38.1%
لا	29	29.9%
أشك في ذلك	24	24.7%
لا أعلم	7	7.2%



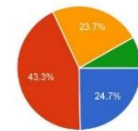
4 بمعنى ان المهرجان يدعم من لديهم مقدرة الابتكار على استغلال الثقافة والتراث والفنون والحرف والصناعات القديمة في ايجاد .. (Innovation) هل تعتقد ان المهرجان فعل القدرة على الابتكار - أفكار عصرية لها قيمتها التنافسية وشخصيتها السعودية؟

نعم	34	35.1%
لا	29	29.9%
أشك في ذلك	26	26.8%
لا أعلم	8	8.2%



5 في مجال الثقافة والتراث، بمعنى ان المهرجان يسعى لإيجاد جيل من المصممين ذوي الدرجات (Design Thinking) والفكر التصميمي (Design) هل تعتقد ان المهرجان يهتم بالتصميم - العملية المختلفة (جامعات وكليات ومعاهد ومدارس) لهم القدرة على تصميم منتجات متنوعة (إلكترونية، كهربائية، أثاث منزلي، وسائل تعليمية، خدمات...) من خلال توفير برامج تفاعلية وإبداعية بينهم وبين اصحاب الفنون والحرفين ورجال الاعمال؟

نعم	24	24.7%
لا	42	43.3%
أشك في ذلك	23	23.7%
لا أعلم	8	8.2%



الفصل الثاني: قيم أهمية كل عنصر حسب رأيك لمستقبل مهرجان الجنادرية

<https://docs.google.com/forms/d/1yVRiVSn91-o99tymUjvK4XdpmvLxYkHfP9vtKKE0Jw/viewanalytics>

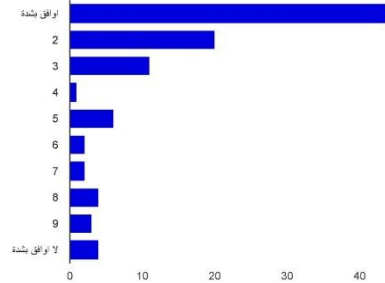
1/10

8/25/2017

Google Forms - دعم الابتكار والتصميم في المملكة العربية السعودية من خلال التراث والثقافة

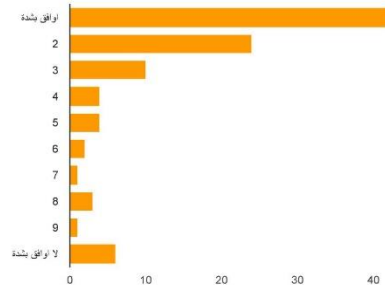
قيم من موافقة شديدة لعدم موافقة شديدة [1]- يتحول المهرجان الى مشروع وطني مستدام ومنتج للإبداع والابتكار والتصميم بجانب البقاء على السياق الحالي كمهرجان للحفاظ على التراث والثقافة [ومعفتها لمدة اسبوعين سنوياً]

وافق بشدة	44	45.4%
2	20	20.6%
3	11	11.3%
4	1	1%
5	6	6.2%
6	2	2.1%
7	2	2.1%
8	4	4.1%
9	3	3.1%
لا اوافق بشدة	4	4.1%



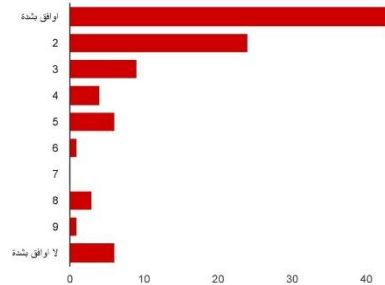
يساعد على ايجاد تنوع اقتصادي للبلاد، وتكوين فرص عمل، وبناء مهن نوعية قائمة على (Design Thinking) قيم من موافقة شديدة لعدم موافقة شديدة [2]- يتبنى المهرجان فكر تصميمي [الابتكار والتصميم]

وافق بشدة	42	43.3%
2	24	24.7%
3	10	10.3%
4	4	4.1%
5	4	4.1%
6	2	2.1%
7	1	1%
8	3	3.1%
9	1	1%
لا اوافق بشدة	6	6.2%



[.قيم من موافقة شديدة لعدم موافقة شديدة [3]- يفعل المهرجان امكانياته الكبيره لتوفير المعرفة القادرة على تكوين فكر مبدع]

وافق بشدة	43	44.3%
2	24	24.7%
3	9	9.3%
4	4	4.1%
5	6	6.2%
6	1	1%
7	0	0%
8	3	3.1%
9	1	1%
لا اوافق بشدة	6	6.2%

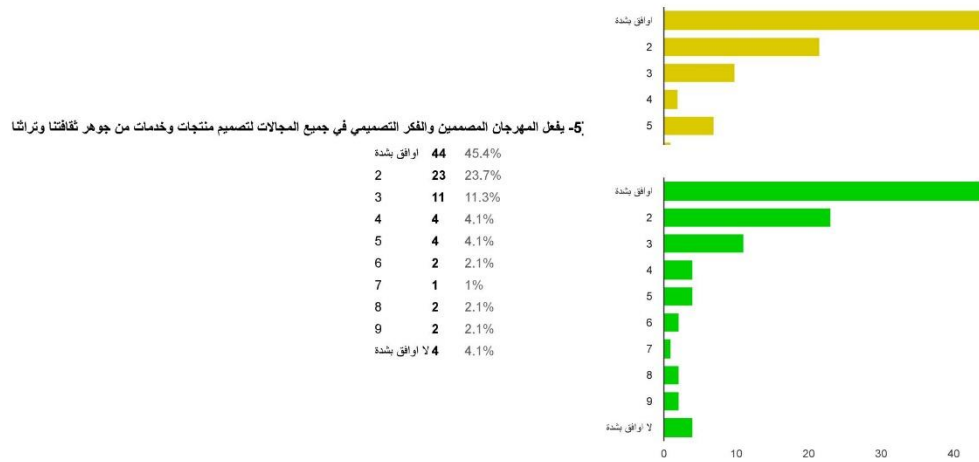


[.قيم من موافقة شديدة لعدم موافقة شديدة [4]- يفعل المهرجان قدرات الحرفيين والموهوبين والمهنيين ورواد الاعمال ورجال الاقتصاد ككيان يتفاعل لإيجاد ابتكارات متجددة]

وافق بشدة	45	46.4%
2	22	22.7%
3	10	10.3%
4	2	2.1%
5	7	7.2%
6	1	1%
7	3	3.1%
8	1	1%
9	2	2.1%
لا اوافق بشدة	4	4.1%

<https://docs.google.com/forms/d/1yRiVSn91-o99tymUjvK4XdpmvLxYkHfP9vtKKE0Jjw/viewanalytics>

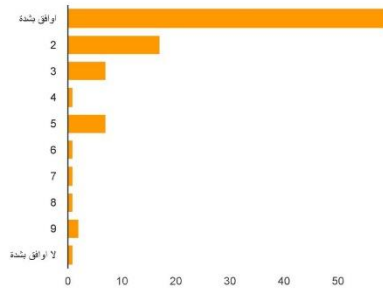
2/10



8/25/2017

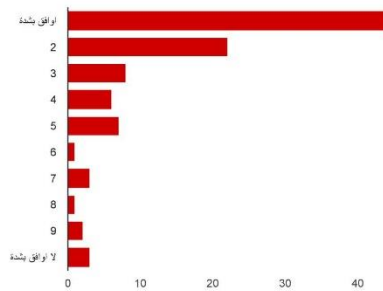
Google Forms - دعم الابتكار والتصميم في المملكة العربية السعودية من خلال التراث والثقافة

4	1	1%
5	7	7.2%
6	1	1%
7	1	1%
8	1	1%
9	2	2.1%
1	1	1%
لا اوافق بشدة		



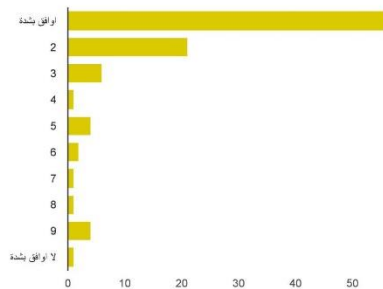
ع والفنون التراثية من الأعمال الفنية والقراء والعروضات والشعر والرقص الشعبي لتعزيز الابداع او الابتكار او التصميم [بروح العصر وضوابط الماضي]

44	45.4%
22	22.7%
8	8.2%
6	6.2%
7	7.2%
1	1%
3	3.1%
1	1%
2	2.1%
3	3.1%



قيم من موافقة شديدة لعدم موافقة شديدة [10- يستفاد من ضيف المهرجان في نقل خبره وتكوين صداقات وريادات ابداعية وابتكارية وتصميمية قائمة على تفاعل الحضارة والثقافة والتراث بين البلدين]

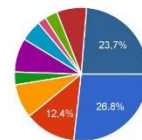
56	57.7%
21	21.6%
6	6.2%
1	1%
4	4.1%
2	2.1%
1	1%
1	1%
4	4.1%
1	1%



(الفصل الثالث: رتب العناصر التي تم تقييمها في ثانيا حسب الاولوية من وجهة نظرك (يمكن تكرار اهمية العنصر

يتحول المهرجان الي مشروع وطني مستدام ومنتج للإبداع والابتكار والتصميم بجانب البقاء على السياق الحالي كمهرجان للحفاظ على التراث والثقافة ومعرفتهما لمدة اسبوعين سنوياً

1	26	26.8%
2	12	12.4%
3	8	8.2%
4	3	3.1%
5	8	8.2%
6	5	5.2%
7	2	2.1%
8	3	3.1%
9	7	7.2%
10	23	23.7%

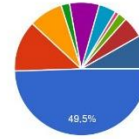


<https://docs.google.com/forms/d/1yVRiVSn91-o99tymUjvK4XdpmvLxYkHfP9vtKKE0Jjw/viewanalytics>

4/10

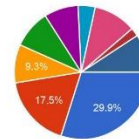
يساعد على إيجاد تنوع اقتصادي للبلاد، وتكوين فرص عمل، وبناء مهن نوعية قائمة على الابتكار والتصميم (Design Thinking) أن يتبنى المهرجان فكر تصميمي

1	48	49.5%
2	12	12.4%
3	8	8.2%
4	2	2.1%
5	7	7.2%
6	4	4.1%
7	1	1%
8	2	2.1%
9	5	5.2%
10	8	8.2%



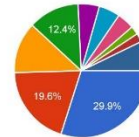
..أن يفعل المهرجان امكانياته الكبيرة لتوفير المعرفة القادرة على تكوين فكر مبدع

1	29	29.9%
2	17	17.5%
3	9	9.3%
4	9	9.3%
5	8	8.2%
6	4	4.1%
7	10	10.3%
8	0	0%
9	2	2.1%
10	9	9.3%



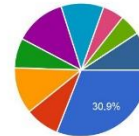
..أن يفعل المهرجان قدرات الحرفيين والموهوبين والمهتمين ورواد الاعمال ورجال الاقتصاد ككيان يتفاعل لإيجاد ابتكارات متجددة

1	29	29.9%
2	19	19.6%
3	12	12.4%
4	12	12.4%
5	5	5.2%
6	5	5.2%
7	4	4.1%
8	2	2.1%
9	2	2.1%
10	7	7.2%



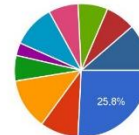
..أن يفعل المهرجان المصممين والفكر التصميمي في جميع المجالات لتصميم منتجات وخدمات من جوهر ثقافتنا وتراثنا

1	30	30.9%
2	8	8.2%
3	11	11.3%
4	7	7.2%
5	12	12.4%
6	10	10.3%
7	5	5.2%
8	5	5.2%
9	0	0%
10	9	9.3%



ان تستمر الجهات الحكومية والوزارات المشاركة في المهرجان على وضعها الراهن في ابراز خدماتها وإنجازاتها ولكن يجب توضيح رؤيتها نحو دعم الثقافة والتراث ابداعياً وابتكارياً وتصميمياً

1	25	25.8%
2	9	9.3%
3	12	12.4%
4	6	6.2%
5	3	3.1%
6	10	10.3%
7	7	7.2%
8	7	7.2%
9	7	7.2%
10	11	11.3%

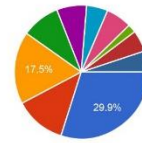


ان يكون جميع المشاركين في المهرجان له هدف ورسالة نحو تفعيل ثقافتنا وتراثنا بتبني افكار ابداعية او مهارات ابتكارية او ريادات اعمال محلية واقليمية وعالمية

8/25/2017

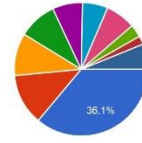
Google Forms - دعم الابتكار والتصميم في المملكة العربية السعودية من خلال التراث والثقافة

1	29	29.9%
2	12	12.4%
3	17	17.5%
4	9	9.3%
5	7	7.2%
6	5	5.2%
7	6	6.2%
8	2	2.1%
9	5	5.2%
10	5	5.2%



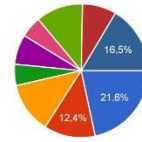
ان يبرز المهرجان حياة وكفاح ونجاح الابهاء والأجداد في الماضي (البيت.. المجتمع.. العمل..) ليكون ذلك محفز للأجيال على التفكير بشكل مختلف (إبداع) وإيجاد مهارات حديثة (ابتكار) وإخراج منتجات (وخدمات تنافسية) (تصميم)

1	35	36.1%
2	12	12.4%
3	10	10.3%
4	9	9.3%
5	7	7.2%
6	6	6.2%
7	7	7.2%
8	3	3.1%
9	2	2.1%
10	6	6.2%



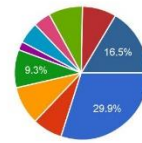
ان يكون هنالك تفاعل بناء بين المجتمع والفنون التراثية من الأعمال الفنية والغناء والعروض والشعر والرقص الشعبي لتعزيز الإبداع او الابتكار او التصميم بروح العصر وضوابط الماضي

1	21	21.6%
2	12	12.4%
3	12	12.4%
4	5	5.2%
5	7	7.2%
6	0	0%
7	5	5.2%
8	11	11.3%
9	8	8.2%
10	16	16.5%



ان يستفاد من ضيف المهرجان في نقل خبره وتكوين صداقات وريادات ابداعية وابتكارية وتصميمية قائمة على تفاعل الحضارة والثقافة والتراث بين البلدين

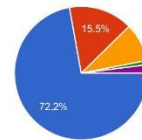
1	29	29.9%
2	7	7.2%
3	9	9.3%
4	9	9.3%
5	2	2.1%
6	5	5.2%
7	4	4.1%
8	8	8.2%
9	8	8.2%
10	16	16.5%



الفصل الرابع: قيم الأهداف الاستراتيجية لهذه الدراسة

..النظر في مشاريع القائمة وموارثنا الطبيعية والبشرية المتاحة.. أن تكون قادره لتكوين مجتمع مبتكر وفرد منتج وبينه مولده للأفكار.. جميعها قائمة على القيم الإسلامية والأصالة العربية -1-

ممتاز	70	72.2%
جيد جداً	15	15.5%
جيد	9	9.3%
مقبول	1	1%
غير مهم	2	2.1%



..إيجاد تخصصات تصميميه واسعه وفكر تصميمي مستدام لتحفيز الاجيال الواعده على الإبداع والابتكار والتصميم من خلال ثقافتهم وتراثهم التي تحمل الكثير من القيم والأصالة -2-

ممتاز	59	60.8%
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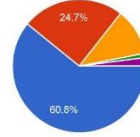
<https://docs.google.com/forms/d/1yVRiVS91-o99tymUjvK4XdpmvLxYkHfP9vtKKE0Jjw/viewanalytics>

6/10

8/25/2017

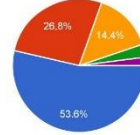
Google Forms - دعم الابتكار والتصميم في المملكة العربية السعودية من خلال التراث والثقافة

جيد جداً	24	24.7%
جيد	11	11.3%
مقبول	1	1%
غير مهم	2	2.1%



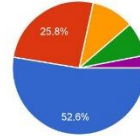
3- بالإضافة للعلوم والتقنية والتسارع المذهل في التقدم المعرفي والرقمي بين الدول.. يبقى التمييز في صف من لهم تاريخ وحضارة وتراث وثقافة يستطيعون دمجها بنقاء ضمن ابداعاتهم وابتكاراتهم -3-
..وتصاميمهم

ممتاز	52	53.6%
جيد جداً	26	26.8%
جيد	14	14.4%
مقبول	3	3.1%
غير مهم	2	2.1%



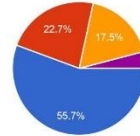
المعطيات تثبت أهمية تفعيل التراث والثقافة عبر الاجيال.. فلماذا لا يتحول المهرجان لمشروع وطني ريادي منتج ومستدام يولد معرفه ابداعيه ومواهب ابتكارية ومصممين وريادة اعمال لمنتجات -4-
وخدمات ذات قيم اسلامية واصالة سعودية وجودة تنافسية؟

ممتاز	51	52.6%
جيد جداً	25	25.8%
جيد	10	10.3%
مقبول	8	8.2%
غير مهم	3	3.1%



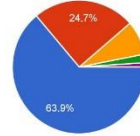
يتحول المهرجان لمشروع وطني منتج مستدام سيكون قادر على تشغيل ذاته بفكر ابداعي مما يخلق تنوع اقتصادي ذكي ويوفر فرص عمل نوعيه في الابتكار والتصميم وحوار تحمل تفكير التنافسية -5-
المحلية والإقليمية والعالمية

ممتاز	54	55.7%
جيد جداً	22	22.7%
جيد	17	17.5%
مقبول	0	0%
غير مهم	4	4.1%



6-..يتحول المهرجان لمشروع وطني منتج سنقدر الحرفيين والموهوبين وتعامل معهم كمعلمين وثروة وطنية ذو أهمية للرقى بقطاع الابتكار والتصميم وريادة الاعمال

ممتاز	62	63.9%
جيد جداً	24	24.7%
جيد	8	8.2%
مقبول	2	2.1%
غير مهم	1	1%



الفصل الخامس: اعزّ برأيك وارجو ان يكون ضمن نقاط محددة

..لك الشكر لفكرك ورأيك واقتراحاتك

شكراً لتفاعلكم ونرجوا السداد لكم

ممتاز

وفتكم الله لخدمة الاسلام والمسلمين

لم الشاهد المهرجان في حياتي لذلك افرح ان يفتح في كل مدينة من مدن المملكة

اقترح ربطه بالمجتمع الشبابي اكثر ليتحقق احتضان الابداعات الشابه مثلاً دعم رحلات مدرسه المهرجان من جميع انحاء المملكة المهرجان الان في صورته الحاليه لا يعاود حدود الرياض

مقترحات تطويرية من الباحث جميلة وتستحق التبلي. نسأل الله للباحث التوفيق والنجاح

اتمنى لك التوفيق

موفقك يا دكتور ، والله يسهلك الامور

التفكير لتدعيم التراث ليكون رافد اقتصادي عالمي مبكر

تتمنى التطوير و الابتكار ، لكن ما يحدث سنويا من تدخل الرجال من ذوي الفكر المتزمّت يعكس الابداع و الابتكار ، تحديد مشاركات المرأة و تقاطعها بشكل كبير بنفس التعاون و الافكار المطروحة بشكل كبير و يحده في التفكير

من وجهة نظر رجل، الخوف من ضغط و ردود افعال ذوي الافكار الرجعية يقلل من الانتاج الفكري و الفني و يحده من عرضه امام المجتمع

بالتوفيق يا استاذي

<https://docs.google.com/forms/d/1yVRiVSn91-o99tymUjvK4XdpmvLxYkHfP9vtKKE0Jjw/viewanalytics>

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