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**ANALYSING CANTONESE DOCTOR-PATIENT COMMUNICATION:
A SEMANTIC NETWORK APPROACH**

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PhD

The Hong Kong Polytechnic University

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The Hong Kong Polytechnic University

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**ANALYSING CANTONESE DOCTOR-PATIENT COMMUNICATION:
A SEMANTIC NETWORK APPROACH**

FUNG KA CHUN

A Thesis Submitted in Partial Fulfillment of the Requirements for the degree of
Doctor of Philosophy

September 2017

CERTIFICATE OF ORIGINALITY

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ABSTRACT

This study is about *healthcare communication*, or more precisely about the reciprocal relations of *language* and *society*, with a multi-phenomenal focus spanning four pressing research needs: (i) the *practical* research demand in conducting healthcare communication in the Hong Kong context; (ii) the *theoretical* need in upholding Halliday's notion of register; (iii) the *descriptive* and *analytical* inadequacy in traditional Cantonese research; and (iv) the *internal* and *external* pressures in developing Cantonese message semantic networks.

Against these research rationales, this current study takes Hong Kong hospital emergency department (ED) as the institutional setting of investigation, aiming at describing the semantics of medical behaviour in ED medical consultation. Featuring Halliday's Systemic Functional Linguistics (SFL) as the theoretical foundation and Hasan's message semantic networks as the major descriptive framework, this study analyses the ten patient journeys in three distinct phases. Phase I concerns the development of Cantonese message semantic networks, following Hasan (1983). Phase II turns to an exploration of the registerial meaning of doctor-patient communication through Hasan's Generic Structure Potential (GSP) analysis, focusing on the intrinsic relations among *context*, *meaning* and *structure*¹.

The academic endeavour in these two-specific phases has made three major fronts of contributions. First, *descriptively*, the systemic engagement in these phases yields a rich description of *meaning* of ED medical consultation in the social context of Cantonese community — as *product* (i.e. meaning as a cross-stratal calibration represented in system networks); as *process* (i.e. meaning as healthcare practices); as *function* (i.e. meaning as semantic features); as *form* (i.e. meaning as lexicogrammatical realisations); as *structure* (i.e. meaning as sequence of generic elements); and as *art* (i.e. meaning as individual autonomy). Second, *theoretically*, the study contributes to what I term as *Cantonese Applicable Discourse Analysis* (CADA), an emerging field of investigation in Cantonese linguistics

¹ Originally, a Phase III analysis was intended to carry out so as to demystify the healthcare discursive practices through the interim product of Phase I. It was hoped that the Phase III findings would illustrate how the acts of meaning between doctors and patients are realised semantically as clusters of semantic attributes, contributing to our understanding of the interaction at work. Regrettably, at the time of the final stage of my study, I was unfortunately involved in some external affairs through which I had to give up the Phase III under some pointing and mistaken attacks and exclusions within and beyond the academic circles. I confess, the quality of the final thesis is a bit less satisfactory and the theoretical arguments remain a bit weak. Yet, it is still a presentable work with its own academic values in terms of its alternative theoretical and descriptive insights. Unfortunate as it was, these brutal attacks, as I see it now, add additional *semiotic flavour* – both ideational and interpersonal – to my journey of doctoral degree, offering me insights in understanding the nature of semiotic power.

which, as evident in the literature, has not been readily taken up by traditional (formal) grammarians/linguists. Third, *systemically*, the proposed Cantonese message semantic networks complement the traditions of functional semantics and language typological studies in the Cantonese language system. More specifically, the contextually-open semantic description, though it is far from language exhaustive, is linguistically ‘applicable’, which could serve as an important discourse tool in pursuing the research studies within CADA.

PUBLICATIONS ARISING FROM THE THESIS

Journal articles

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Books/Chapters in Books

Fung, A. (2016). Hasan's semantic networks revisited: a Cantonese systemic functional approach. In W. L. Bowcher & J. Yang (Eds.), *Society in Language, Language in Society: Essays in Honour of Ruqaiya Hasan* (pp. 115 -140). United Kingdom: Palgrava Macmillan.

Fung, A. & Low, F. R. (in press). 'Semantic Networks'. In G. Thompson, W. L. Bowcher, L. Fontaine, & J. Y. Liang (Eds.), *Cambridge Handbook of Systemic Functional Linguistics*. Cambridge: Cambridge University Press.

Conference Presentations

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Slade, D., Matthiessen Christian M.I.M., Pun, J., Lam, M., Espindola, E., Veloso, F., **Fung A.**, Williams, G., Tang, K. S., Chan, O. C., M., Tang, S., & Tsui, K. L. (2012). '*Emergency communication: communicating in A&Es*', Hospital Authority Convention, Hong Kong, 7 - 8 May, 2012.

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外面的世界很精彩
這裡的世界很無奈

For those enemies, we celebrate each other.
For my buddies, our promises are missed.

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Chapter 1

INTRODUCTION

1.1 Introduction

As a prologue to the present study, this chapter introduces the entire research project in terms of its research context, research motivations and research aims. To commence with, Section 1.2 introduces the research background, shedding light on the linguistic context at which this current project is situated. Section 1.3 offers a close scrutiny to the research motivation with regard to four specific aspects *viz.*, (i) the *practical* research demand in conducting healthcare communication in the Hong Kong context; (ii) the *theoretical* need in upholding Hallidayan notion of registers; (iii) the *descriptive* and *analytical* inadequacy in traditional Cantonese research (iv) the *internal* and *external* pressure in developing Cantonese message semantic networks. The reconciliation of these four research rationales thus builds a substantiated argument in analysing doctor – patient interaction through message semantic networks. Section 1.4 then offers a discussion of research objectives, the general research questions (*G-RQs*) that this project intends to address, as well as its respective research significance. Finally, Section 1.5 warps up this introductory chapter by presenting the thesis organisation in a chapter-by-chapter basis.

1.2 Research Background

The study of language and communication in professional contexts, as asserted by Sarangi and Candlin (2010, p. 1 - 2) is of ‘sheer complexity’, involving descriptions, interpretations and more importantly, the explanations of ‘the institutional and interactional orders of “what it is that is going on” in *crucial communicative sites* and its *critical moments* in those sites’ (Sarangi and Candlin, 2010, p. 1, emphasis mine). Crucial communicative sites refer

to the contexts of communication where participants identify it as salient (Candlin, 2000, p. 9). The salient sites of communication are ‘in part defined physically, in part by topic, in part by participation, and in part by perception’. As communication unfolds in these critical communicative sites, there are possible occurrences of moments ‘where the communicative competence of the participants is at a premium and at its greatest of challenge’ (Candlin, 2000, p. 10). These moments, in Candlin’s term, are denoted as ‘critical moments’ (cf. potential risk points in Slade *et al.*, 2015). Linguistically, such moments are realised by ‘participants’ choices and responses to acts of language and communication’ (Candlin, 2003, p. 49). Following this lead, it appears that the recognition of critical communicative sites and their critical moments are the prerequisite in studying healthcare communication.

1.2.1 Hospital emergency department as a crucial communicative site

In this study, contemporary hospital emergency departments (EDs) are regarded as *crucial communicative sites*. In the 21st century, contemporary hospitals, as maintained by Iedema (2007a, p. 7), are one of the ‘most complex social organisations produced by humankind’, including medical technological changes, increasing demands for organisational accountability, health policy and hospital reform, rising public scrutiny of patient safety, increased stakeholder representation in health care decision-making, escalating centrality of communication and health information management, to name but a few (see Iedema, 2007b). Among all challenges, the pressure on effective communication is probably the most significant in the sense that it transforms hospitals from a traditional site of clinical work into a crucial site of communication. To illustrate the significance of communication, let me turn to Braithwaite’s (2007a, p. x- xi) quote on hospital communication:

... hospital communication is increasingly at the forefront of the concerns of policy makers, hospital managers, patients and their carers, and clinicians. Because hospital care is becoming more multifaceted thanks to new technologies and treatments, and with patients' trajectories through hospital services becoming more complex *as a result, communication is becoming more and more important to the work that people do in hospitals*. To this already complicated picture you need to add the rise in social mobility on the part of not just health care workers *but also their patients, putting even more pressure on the need to communicate about how to coordinate treatments, professionals and patient trajectories across hospital services* (emphasis mine)

Central to this quote is that contemporary hospitals, like other contemporary workplaces, place much emphasis on communication, or more precisely, concerning 'knowledge', 'information' and 'communication networks' (Castells, 2010). It follows that while contemporary hospital cares still lie heavily in the expert-professional acumen of the practitioners (Iedema, 2007a, p. 2), their practices have to be 'intelligent', 'communicative' and 'affective' (Hardt and Negri, 2004, p. 109). In other words, the pressures that our healthcare practitioners are currently facing are unprecedentedly immense – not only do they deal with the increasing complexity of hospital care works, but also the escalating demands of the communicating works, or more precisely, the efficacy to 'enact, informate and communicate about their work' with patients and with other healthcare practitioners (Iedema, 2007a, p. 2).

Among all the sub-division of contemporary hospitals, EDs are focused in this current study¹. ED is a research site which has attracted much scholarly attraction in the front of

¹ This, by no means, suggests that other departments in contemporary hospitals are less important. Previous decades have witnessed a growing number of research studies focusing on the 'situated communication and clinician interactions' (Iedema, 2007: 2) other than emergency departments. As demonstrated by Iedema (2007), communicating works in hospitals extend to a more general level including corridor conversation (e.g.

healthcare research (Matthiessen, 2013; see also Slade *et al.*, 2008, 2011 and 2015 for recent studies). Contextually, it is a complex and difficult workplace, and is often cited as the busiest and the most congested areas in contemporary hospitals. The complexity and difficulty, as maintained by scholars, are a product of a number of situational factors including high pressure and high complexity of tasks (e.g. McPherson *et al.*, 2003; Creswick *et al.*, 2009), high communication loads (e.g. Coiera and Tombs, 1998; Coiera *et al.*, 2002; Spencer, Coiera and Logan, 2004), disjointed work patterns (e.g. Braithwaite and Westbrook, 2005; Braithwaite, Iedema and Jorm, 2007), a lack of familiarity between patient and clinicians (Hobgood *et al.*, 2002; Cheung, 2005, Slade *et al.*, 2008 and 2015) to name but a few. Given this high contextual demands, it is not surprisingly that ED is a critical research site where effective communication is constantly challenged, and fraught with risks and critical moments.

1.2.2 Doctor-patient communication as a critical communicative event

If we view the communication in EDs from the perspective of patient journey², it follows that the communicating work is not a single and straightforward interaction. Rather, it is an unduly complex communication process comprised of a series of activity stages, each of which entails a sequence of communicative events (Redfern *et al.*, 2009, p. 658; see also Slade *et al.*, 2008; 2015 and many others). The complex issue of ED is further complicated for it is a one-to-many communication. That is to say, as the patients start their journeys in the ED, they will be physically transferred from one location to another (i.e. from the

Long *et al.*, 2007), anesthetic talk (e.g. Pope *et al.*, 2007), as well as to the level of organisational communication such as negotiation of the priorities of unplanned emergency surgery (e.g. Lum and Fitzgerald, 2007), role of signs and representations (e.g. Måseide, 2007), management of operating room list (e.g. Riley and Manias, 2007). It should be emphasised that the current study only takes emergency departments as the point of departure.

² By 'patient journey', it denotes the totality of interactions that patients will go through once they are admitted to the emergency departments. It is a notion which is well-rehearsed in the literature of medicine and patient satisfaction. See Chapter 3 Section 3.8 for a detailed discussion.

waiting room to a consultation bed, to a prescribed treatment or testing area) and have to communicate constantly with a number of unknown healthcare practitioners from time to time, including triage nurses, doctors, allied health staff, radiologists etc (Slade *et al.*, 2015, p. 6, see also Slade *et al.*, 2008 and many others). If we view these communicative events locally, doctor-patient communication is perhaps the most challenging and significant clinical interaction³, not only because it is only the doctors who are authorized to make clinical judgments in EDs, but also the fact that contemporary doctor-patient communication is essentially a *professional practice* (Sarangi and Candlin, 2011, p. 5)

Professional practices, as maintained by Sarangi and Candlin (2011, p. 5), are ‘institutionally and organizationally embedded’ *rules* and *procedures*, resulting from both ‘prolonged years of education and training’ and ‘the application of established theories and principles’ (Sarangi and Candlin, 2010, p. 3)⁴. While it appears that professional practices are theory-dependent proceduralisation or control, Sarangi and Candlin go to an extent to claim that the mere characterisation of professional practices as ‘logical, patterned, indiscriminate application’ of knowledge (Sarangi and Candlin, 2010 p. 4) is inherently inadequate; what must always be there is a sense of artistry - they are ‘creative, dynamic as well as context and case-specific’ (Sarangi and Candlin, 2010, p. 3 – 4), or in Schon’s (1987,

³ Again, this by no means suggests that other communicative events are less important. If we view the emergency communication globally, the entire ED communication process is essentially a critical moment. Like other professional settings, the work patterns in EDs are ‘professionalised and tribal’ (Creswick *et al.*, 2009, p. 248) so that practitioners are required to collaborate with different professions in delivering care. In this sense, communicative events in EDs are not disjointed clinical communication but intrinsically connected. ED communication is thus an organizational communication, where practitioners have to perform organizational work with other professions so as to manage and deliver patient care. Communicative competence of healthcare practitioners are thus constantly challenged, as they are required maintain a smooth communication flow.

⁴ Such a view on professional practices is closely related to Schon’s (1987, p. 227) ‘proceduralisation of the profession’, defined as any attempts which ‘reduce professional practice to a set of absolutely clear, precise, implementable procedures, coupled with controls designed to enforce them and eliminate surprise’ (p. 227).

p. 228) words, as ‘artistry, wisdom, and the feel for materials, all of which depend upon judgment and discretionary freedom’.

Following this lead, it appears that the contemporary doctor-patient communication is both *professional practices as science* and *professional practices as artistry*. It is a *science* in the sense that doctors involve prolonged processes of participating in and experiencing practices so that they acquire deep, extensive, medical knowledge (Paterson, Higgs and Donnelly, 2012, p. 93 – 94). This experience-based learning in turn develops their tacit knowledge, enabling them to make professional clinical judgment – ‘to interpret patient problems and issues and demonstrate saliency and concern in responding to these matters’ (Dreyfus and Dreyfus, 1986, p. 2). In other words, doctor-patient communication is rooted in the bio-medical knowledge, where the primary concern of doctor lies in ‘the ‘technical-scientific skills and the diagnosis of specific diseases’ (Mishler, 1984, p. 9).

Meanwhile, contemporary doctor-patient communication goes beyond the medical world that is traditionally conceived; it extends to the non-medical world, or more precisely, the socio-relational aspect of the patients. That is to say, in addition to taking into account of diseases, contemporary doctors have to recognise patients as persons, attaching fundamental importance to the development of the ‘theoretical underpinnings of the patient-professional relationship’ (Collins *et al.*, 2011, p. 96 – 97). In other words, contemporary doctor – patient communication needs to feel for the patients, recognising not only diagnosis of specific disease, but also the patients’ ‘problems within the context of their lifeworld of meaning’ (Mishler, 1984, p. 6). Intersecting both the bio-medical and socio-cultural paradigms, together with the situational complexity of EDs, renders doctor–patient communication as a critical communicative moment.

1.3 Research Rationales

This thesis aims to study the doctor-patient interaction in one local hospital ED in Hong Kong. More precisely, it is guided by four distinctive research rationales; each of which represents a specific research need relevant to this study.

1.3.1 A lack of healthcare communication research in Hong Kong

Linguists worldwide, and especially those from the background of applied linguistics, have conducted a good deal research on communication in professional contexts, addressing the interrelationships of language, communication and professional practices (e.g. Sarangi and Candlin, 2010 and Bartlett and Chen, 2013). Granted that local studies have investigated the various ‘crucial communicative sites’ and ‘critical moments’ in Hong Kong and set out to describe, interpret and explain the communicative practices from different points of view (see Bhatia, Cheng, Du-Babcock, and Lung, 2009; Cheng and Kong, 2009; Cheng and Suen, 2014 to name but a few), these studies have tended to focus on the financial and business services, and thus have not done justice to one key professional context *viz.*, healthcare communication.

Hong Kong, like other international cities, has placed much emphasis on upholding effective healthcare communication in various healthcare settings. Recent years have witnessed an increasing demand on healthcare communication; various stakeholders in healthcare system have voiced out their concerns over poor communication. For instance, Hospital Authority (HA), the statutory body in Hong Kong which is responsible for managing Hong Kong's public hospitals services, has asserted that effective healthcare communication is one of the strategic directions for the coming five years, extending from hospital-internal communications (e.g. adopting patient-centred approach in

communication, improving IT and communication technologies, enhancing staff communication and engagement) to hospital-external communication (e.g. promoting information dissemination and enhancing channels of communications with community) (Hospital Authority Strategic Plan 2012 – 2017). The significance of upholding a high quality of communication in public healthcare system is also reflected at the level of risk-management. According to the *Risk Alert*, a risk management newsletter for Hospital Authority healthcare practitioners, *communication* is considered as the contributory factor and/or recommended preventive measures of almost half (17 out of 36) of the local sentinel events, serious untoward events and risk scanning reported from September 2009 to September 2010. The local media and patient organisations have also expressed their grave concerns over poor healthcare communication in Hong Kong. For example, the past years have witnessed frequent reports of medical blunders in media reports; most of which are related to poor or ineffective communication. This includes wrong dosage of medication (Chung, 2007a; Chung, 2007b and Moy, 2009), surgical instruments (Chung, 2007b), poor communication problems (Ho, 2010) to baby mix-up (Moy, 2009), to name but a few. Patient organizations have also expressed their voices in various channels. In a survey conducted by the Hong Kong Society for Rehabilitation of 813 chronically-ill patients, more than half of the respondents express that the medical advice received was hardly useful (Ho, 2010).

Granted the fact that upholding a high quality of healthcare communication has been one of the central issues in the Hong Kong, and is well-rehearsed by various stakeholders, the local scholarly interest in exploring the significance of communication in the local Hong Kong healthcare systems is still in a nascent stage. In the recent volume edited by Gabriel M. Leung & John Bacon-Shone (2006), *Hong Kong's Health System: reflections*,

perspectives and visions, out of the 22 chapters and long sections of commentary on the development and nature of the Hong Kong healthcare system, none is devoted specifically to healthcare communication. While there are some studies investigating the role of communication in healthcare systems (e.g. Chung, 2005), these studies tend to focus on the patients' satisfaction, with very little research addressing the complex communicative process articulated in various healthcare settings.

Perhaps, it is not until 2013 that the situation got change, thanks to the establishment of a large-scale research centre, namely *The International Research Centre for Communication in Healthcare* (IRCCH)⁵. With the collaborative effort between linguists and healthcare providers in EDs, multi-disciplinary research projects have been conducted. The past several years saw a growing number of research papers focusing on the local healthcare communicative practices from the perspectives of communication studies and linguistics (e.g. Matthiessen, 2013; Chandler *et al.*, 2015; Slade *et al.*, 2015b; Slade *et al.*, 2016). Apparently, this reflects a strong need in complementing this trend of study.

1.3.2 Upholding Halliday's notion of register and registerial analysis

Ever since the introduction of 'register' to SFL in early 1960s, the term 'register' has become one of the 'central' theoretical constructs in the functional paradigm – its centrality not only lies in its importance to the theory, but is also at the center of the theory, holding all the basic dimensions of language in Hallidayan model together (Lukin *et al.*, 2011, p. 188; see also Matthiessen, 1993). For Halliday, register is a functional the functional

⁵ IRCCH is an international research centre jointly convened and supported by the University of Technology, Sydney and the Hong Kong Polytechnic University, with Curtin University as an institutional node. For details, see <http://ircch.org/>.

variety of language accounting for ‘what people do with their language’ (Halliday *et al.*, 1964, p. 87, see Chapter 3 for details).

However, with the continuous development of SFL, the past decades have witnessed a new theoretical use of ‘register’ in the theory, a development made by J.R. Martin and his colleagues who coin ‘register’ as the ‘semiotic system constituted in the contextual variable field, tenor and mode’ (Martin, 1992, p. 501-502; see Chapter 3 for details). Given that any provision of theoretical term in SFL has to be defined and positioned *vis-à-vis* other concepts in the theory (Hasan, 2004, p. 16), this alternative use of ‘register’, by no means, suggests a simple ‘terminological variants’ – it is essentially a change of ‘the nature of the concept’ in this theory of language (Lukin *et al.*, 2011, p. 188). Such a change has one immense implication – SFL is not merely one model of language; there are ‘dialects of SFL’ *viz.* Halliday’s model of language and Martin’s Genre model.

While both models have gained widespread acceptance in SFL community and shed profound insights in register/genre studies, their inherited theoretical distinction should, by no means, be downplayed, if not, ignored. Early in 1990s, Matthiessen’s paper *Register in the round* has addressed this theoretical distinction, eliciting a loudest call for registerial analysis to be studied from both perspectives so that each variety of SFL could ‘clarify the overall theoretical space’ (Matthiessen, 1993, p. 234). However, as remarked by Lukin *et al.*, (2011, p. 187), it is, in essence, Martin’s Genre model which has gained a tremendous influence in the past decades, traditionally known as ‘Sydney School’ in the SFL community. The relatively few descriptive works that are genuinely based on Hallidayan notion of register, as commented by Lukin and her colleagues, does not imply that the Halliday’s register theory is less illuminating, but probably a consequence of the obscurity

of the theoretical distinction of the uses of ‘register’ in the two models, together with a constant downplay of the difference between ‘register’ and ‘genre’ in Martin’s works (Lukin *et al.*, 2011, p. 188, 207). If this view is true, it follows that the theoretical distinction between these two dialects has not been made explicit as Matthiessen did in more than twenty years ago. Indeed, up till now, Halliday has never adopted Martin’s alternative proposal but continued to hold his view on register (Lukin, *et al.*, 2011). Given that the distinction remains, and the comparatively few studies which are genuinely grounded in Halliday’s paradigm, it appears important to continue to uphold the distinction, and conduct registerial analysis following Hallidayan notion of ‘register’.

1.3.3 Inadequacy in the traditional Cantonese research

By far, the lion share of local Cantonese linguistics literature is grounded in descriptive linguistics, with an overwhelming attention on both dialect typology and dialect grammar research, which, to a certain extent, leaves the applicability and social accountability undiscussed (see Kwok, 1984, Wu, 1990, 1996, Matthews and Yip, 2011; Leung, 2005; Cheung, 2007 and Tang, 2015 for their classic descriptions of Cantonese grammar). In particular, the descriptions, like those in Mandarin studies, have tended to employ a formal approach as their descriptive foundations (see Chao, 1948, 1968; Gao, 1948; Wang, 1943 and many others). The strong emphasis on the *form* over *meaning* in Cantonese linguistics, in my view, appears less desirable in terms of (i) the status of meaning and (ii) the applicability in performing discourse analysis.

With regard to the former, it appears to me that traditional Cantonese linguists overlook the status of meaning within the linguistic proper. One relevant case in point is the use of

question and *interrogative* in literature. *Contra* English, Cantonese linguists tend to treat the two terms as synonym, and in some occasions, to use *interrogative sentence* as an English equivalence of the Chinese term '疑問句' (cf. Wu, 1990; 1996⁶). In my perception, the use of 'interrogative sentence' in Cantonese literature to represent both 'question' and 'interrogative' is neither a matter of terminological differences nor the unawareness of the significance of the study of meaning, but is essentially a manifestation of their conceptions of meaning in relation to grammar – meaning is not a branch of study in Cantonese tradition but more or less a linguistic phenomenon subsumed in the discussion of *form*. Such a view, to me, is less favourable because *meaning* and *form* are the two sides of the same coin in language description (Hasan, *et al.*, 2007). The emphasis on *form* over *meaning* will not only 'obscure the nature of the relationship between syntactic structure and meaning' (Huddleston, 1984), but also hinder the development of the study of Cantonese semantics.

With regard to the latter, the formal descriptions advocated by traditional Chinese linguists appear less fruitful in tackling research problems of higher-ranking meaning units. While some Cantonese linguists have been devoting much academic energy to studying the semantic, pragmatic and discourse meanings of Cantonese particles – one important front of investigation of meanings in Cantonese linguistic tradition, their discussions have tended to be subsumed under the discussion of Cantonese grammar (see Luke, 1990; Fung, 2000; Leung, 2005 and many others). In this sense, such descriptions are mostly applicable on the

⁶ Unlike other traditional Cantonese linguists, Wu has argued a terminological distinction should be made when it comes to the discussion of *question* and *interrogative* in Cantonese. For Wu, *interrogative* is grammatical entity in the sense it only contains formal signals. In other words, this terminology denotes only its inherent grammatical characteristic, and more specifically, how this characteristic is related to others. That is to say, interrogative is a label which is relative to declarative, imperative and exclamatory. They four grammatical entities form a system of sentence/clause. They are mutually exclusive to each other and each of them has its own particular lexicogrammatical structure (e.g. word order, intonation, sentence final particle etc.).

clausal or sentential level, but fail to capture the linguistic phenomena operating at a higher level of abstractions such as text, discourse and register. Apparently, a discourse-oriented Cantonese description is what we are currently lacking.

Here, I argue that it is time to conduct a paradigmatic shift in researching Cantonese linguistics by changing the tradition from descriptive linguistics to applied linguistics. More precisely, it views the descriptive tasks through functional approach so as to push the descriptions from the lexicogrammatical towards discourse, illustrating not only how Cantonese functions in context, but also how it facilitates or undermine our communication.

1.3.4 Revisiting semantic networks

In SFL, Ruqaiya Hasan and her colleagues have placed much emphasis on semantics (see Hasan, *et al.*, 2007, Hasan, 2010). Such an emphasis reflects her views that the study of meaning is, in essence, one of the central aspects in SFL, which theoretically shares the same status as the study of lexicogrammar. For Hasan, semantics and lexicogrammar are ‘two sides of the same coin’ (Hasan, *et al.*, 2007, p. 699). That is to say, without lexicogrammar, meaning could not be manifested in our human social practices; and by the same token, without meaning, lexicogrammar would have no *raison d’être* in our human languages (Hasan, *et al.* 2007, Hasan, 2010). Being a ‘linguistic inter-level to context’ (Matthiessen, 1993, p. 227; see also Halliday, 2009; Hasan, 2009; 2010; Hasan, *et al.*, 2007), semantics serves as the point of departure in describing and accounting for context and lexicogrammar. More importantly, it enables analysts to make sense of human life since most of our daily social practices are essentially ‘acts of meanings’ (Hasan, 2010, p. 267).

With the significance of semantics, the past decades have witnessed a great deal of academic energy in semantic studies in the SFL literature, all of which produce fascinating semantic descriptions, enabling us to illustrate the various aspects in the semantic stratum (see Fung and Low, in press; see also Matthiessen, 2007, 2009 and 2015a, b for a historical development of semantics in SFL). Hasan's message semantic networks are a particular case in point. Originally developed for semantic variation research, Hasan's message semantic networks have illustrated its strong descriptive power in discourse analysis (Fung and Low, in press). Powerful as they are, her networks have only been applied in the study of English discourses. To the best of my knowledge, it appears that there is only one attempt which has adopted Hasan's approach in studying semantics in language other than English (cf. Wong, 2009 on punctuative messages of Cantonese).

Having benefited from Hasan's outstanding work for over three decades, it appears to me that systemists have encountered another 'pressure on semantic science' since 1970s (Hasan, *et al.*, 2007, p. 699); the existing networks should be extended in order to meet both the 'internal pressure' and 'external pressure' (Matthiessen, 2009, p. 14). Elsewhere I have demonstrated an 'initial try' in extending and developing her semantic network of questioning in Cantonese both internally and externally (see Fung, 2016). In my view, this initial try is important because it sheds immense research implications, both in (i) systemic function typology research/ multilingual research and in (ii) message semantics.

In a language typology sense, it is argued that Hasan's message semantics could contribute to a new front of investigation in systemic function typology research/ multilingual research. Existing typological research tends to focus on the lexicogrammar but not on

semantics (see Caffarel, Martin and Matthiessen, 2004). Even though there are some initial accounts in the level of semantics, their focus lies mostly in interpersonal metafunction i.e. exchange structures of dialogues (Li, 2003, 2007; McDonald, 1998). A formalised description of a metafunctionally-regulated semantic unit is currently lacking in systemic function typology research. In view of it, Hasan's message semantics could become a new driving force for systemic function typology research/ multilingual research.

In a message semantic sense, it is believed that the robust descriptions on lexicogrammar yielded in the multilingual research could help us explore how semantic options are realised lexicogrammatically in various languages. As remarked by Hasan, lexicogrammatical realisation is a key concern in doing semantic networks since it is hypothesised as "the differences in linguistic 'form' equals to differences in meaning" (Hasan, 2010, p. 283). The extensive lexicogrammatical systems generated from these typological research studies thus enable us to grammaticalise the meanings explicitly, and more specifically, advance Hasan's notion of message semantics.

1.4 Research Objectives, Research Questions and Research Significance

In responding to these specific research needs, three broad research objectives are proposed:

- (i) To contribute to the research studies concerning healthcare/ED communication as professional communication
- (ii) To continue the front of investigation of systemic functional register based on the notion elaborated by M.A.K. Halliday
- (iii) To further develop Hasan's idea of semantics by extending her contextually-

open message semantic networks to Cantonese

The first objective is more practical, reflecting the pressing research demand in conducting Discourse Analysis (DA) concerning ED doctor-patient communication. The second objective is more theoretical: it aims to apply Halliday's Systemic Functional Linguistics (SFL) theory as the theoretical foundation. The third is more descriptive and analytical – it aims to further develop my proposed Cantonese message semantics networks, featuring it as the discourse analytical framework in this study (Fung, 2016).

Corresponding to these three objectives are two general research questions (*G-RQs*). As the thesis unfolds, a number of sub-RQs are presented at the different phases of research and will be addressed in the corresponding chapters. The three broad *RQs* are thus organised as follows:

G-RQ1: How is the Cantonese message semantic networks conceptualised?

G-RQ2: What is the registerial identity of ED doctor-patient communication?

G-RQ1 aims to continue the front of investigation set out in Fung (2016) by offering a comprehensive account of the metafunctionally-regulated semantic systems in the language system of Cantonese in a categorical fashion. A mapping of this kind thus contributes to those functional linguists – both semantists and typologists – and Cantonese grammarians, enabling them to appreciate the semantic landscape of a given register, or more generally, the meaning potential of the system of Cantonese.

G-RQ2 intends to test the operationalisation of Hallidayan register theory through message

semantic networks. Seeing ED doctor-patient communication as register *synoptically*, it seeks to relate wording to context via ‘text wide meaning’ (see Hasan, 2003 [1973]) – both registerial structure and message semantics choices. A registerial study of this kind thus enables functional systemists to mediate the tension between the need of language theory as theoretical foundation and the desire of quantitative and qualitative framework in registerial analysis (see Lukin *et al.*, 2011, p. 206)

1.5 Outline of the thesis

Having highlighted the research significance of this study, this section outlines the layout of this thesis. There are eight chapters in this thesis, which are sequentially organised as follows:

Chapter 1 serves as a prelude of the entire research project, which overviews the research background, research rationales, research objectives and research questions as well as its respective research significance.

Chapter 2 reviews the meanings of ‘meaning’. It begins with an exploration of meaning from the perspective of meaning exchanges, followed by an in-depth discussion and characterisation of the various linguistics meanings which are relevant to this current study.

Chapter 3 aims to build the theoretical foundation of the whole project. It commences with justifications in applying SFL as the theoretical framework, followed by a comprehensive review on the issues pertaining to language as a

higher-semiotic system, semiotic dimensions of languages, context and register.

Chapter 4 concerns the notion of semantic networks in SFL literature. The first half of this chapter addresses two types of semantic network in SFL literature *viz.*, Halliday's sociolinguist semantic network and Hasan's message semantic networks. The second half of this chapter sheds light on its research implications in both semantic variation research and discourse analysis.

Chapter 5 depicts the research design of this project, detailing the data collection, research subject and data processing. The general research questions *G-RQs* set out in Chapter 1 are further developed into a number of specific research questions *S-RQs*, each of which serves different purposes in each research phase of this current study.

Chapter 6 offers a comprehensive account of Cantonese semantic networks with regard to the systems of PROGRESSIVENESS, AMPLIFICATION, CONTINUATION and RELATION ENACTMENT. Semantic options within these systems are exemplified by textual analysis of doctor – patient interaction.

Chapter 7 provides a qualitative account by linking the Cantonese semantic networks to the GSP analysis of patient journey. In this chapter, the descriptions of Cantonese message semantics – the interim product based on Chapter 6 – are employed to illustrate how generic elements in ED patient journey are semantically manifested through the activated meaning options in each act of meaning.

Chapter 8 concludes this thesis by reiterating the main findings of this thesis and its research implications. Research limitations and future directions are also discussed.

1.6 Chapter Summary

This chapter serves as a prelude of what the present study intends to conduct. Against the background of hospital emergency department as crucial communicative site and doctor – patient communication as critical communicative event, it outlines the research rationales and builds an argument in analysing ED medical encounters through semantic network approach. Following the research argument is the three research objectives, its respective general research questions (*G-RQs*) and its research significance. Finally, the chapter sketches out the thesis layout in a chapter-by-chapter fashion.

Chapter 2

MEANINGS IN OUR HUMAN LIFE

2.1 Introduction

Chapter 2 reviews the literature pertaining to meanings, which is organised into five sections. Section 2.2 aims to offer a general account of meaning with regard to meaning exchange – a common yet significant social practice in our daily human activities. Section 2.3 then moves to a specific account of meaning, addressing its ‘slippery nature’ from a multi-disciplinary perspective, including sociology, psychology, and linguistics etc. After demonstrating the fuzziness of meaning, Section 2.4 turns to a discussion of one specific type of meaning *viz.*, linguistic meanings. In particular, it addresses how meanings in language are conceptualised as a unit of linguistic sign, drawing on Saussure’s and Ogden and Richard’s works. Section 2.5 is concerned with the various approaches in studying linguistic meanings, including those from the traditions of semantics, pragmatics, general linguistics, and functional linguistics. Having reviewed the various linguistic traditions in meaning study, Section 2.6, the final section, addresses the links among these traditions, characterising the *pros* and *cons* from the perspective of discourse analysis.

2.2 Meaning exchange as a daily social practice

The centrality of meaning to our human lives is beyond doubt. This is particularly true if we take an open-ended view towards meaning, one has to realise that our world ‘turns on the exchange of meaning’ (Hasan, 2010, p. 267).

Meaning, in a general sense, exists in any forms – the house one is living in, the clothes

that one is wearing, one's behaviour and personality to name but a few. In other words, any phenomenon in our practical life is 'beholden to acts of meaning' (Hasan, 2010, p. 267). Given that meaning is essentially '*here, there and everywhere*' (Hasan, 2010, p. 272), the most important issue resides in the ways human beings interpret meanings. That is to say, a phenomenon is meaningful not because meaning exists in the air or in the mind waiting to be expressed (Halliday and Greaves, 2008, p. 65) but because they are open to interpretation. As Hasan notes, provided that we are not dozing, not drunk, not deranged or not dead, human beings do (un-/sub-)consciously interpret, make sense of, and derive significance from an immense range of phenomena in their own perspectives (Hasan, 2010, p. 273). Acknowledging that our living world is loaded with meanings, and meaning interpretation is one of the major daily social practices in our human life, it is, thus, reasonable to ask: *What types of meaning are centrally involved in our daily social practice and why?*

To answer these questions, let me turn to McCarthy, Matthiessen and Slade (2010, p. 53), who have highlighted what our human life is from a discursive perspective:

Life is a constant flow of discourse – of language functioning in one of the many contexts that together make up a culture. Consider an ordinary day. It will, very likely, start with discourse (for example, greeting members of the household and some item of news from the radio, TV; world wide web or printed newspaper) before individuals rush off to go to work or school. The day then continues with a variety of discourses in these institutions: discussing plans at a business meeting, writing an undergraduate psychology essay in the university library, ordering lunch at a fast food outlet. (The day may, of course, include contexts that are not part of daily life, both private ones, such as a consultation with a medical specialist, and public ones, such as the inaugural speech by a newly elected official.) As the day

outside the home draws to a close, the members of the household come together again, quite possibly sitting down for a joint meal with enough time to review the day and dream about the future (emphasis mine).

Central to McCarthy, Matthiessen and Slade's quote is the pervasiveness of meaning in our daily social practices, or more technically in discourse. Though McCarthy, Matthiessen and Slade have not specified the types of meaning involved, it can be inferred from their view that linguistic meaning, and more specifically, the meaning realised in language, is of utmost importance because 'language consists of meaning' (Halliday and Greaves, 2008, p. 65).

To further illustrate the exchange of meaning as a daily social practice, let me turn to Matthiessen's notion of 'discourse diary'. As explained by Matthiessen, discourse diary is a kind of log which traces 'the path of a person through a day taking on a succession of different roles in interaction with other persons in a succession of situation types'. A log like this thus serves as solid evidence exemplifying the fact that whenever we interact through discourse, we are indeed exchanging meaning.

As shown in Figure 2.1, the academic staff member enters a succession of discourse activities where the exchange of meaning takes places consecutively i.e. listening to talk-back radio, reading and writing email messages, reading web news, buying croissants at corner stores, *etc.* Not surprisingly, most of the discursive activities listed above preselect language as the primary mode of communication. Even though these activities are distinctive as they are carried out for different purposes with different interactants in different manners, they are all the same in a sense that they are not mere material actions –

they are, in essence, semiotic activities, with linguistic meaning being exchanged from time to time.

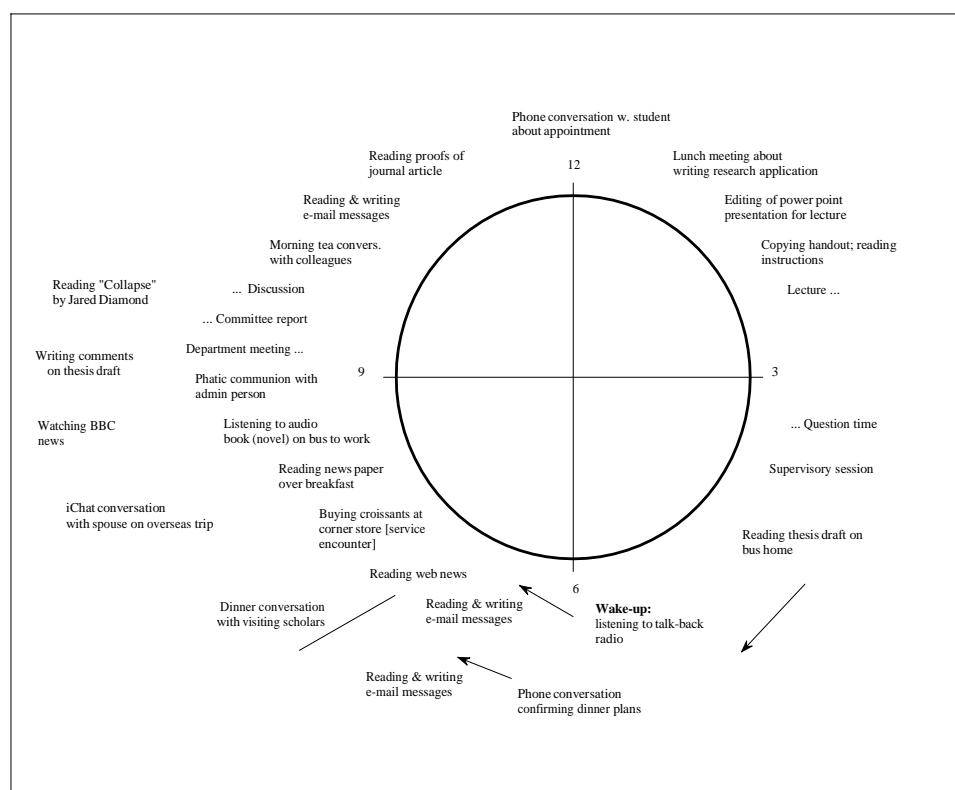


Figure 2.1 Discourse diary (Matthiessen, personal communication)

If McCarthy, Matthiessen and Slade's view is true, it appears that it is impossible for a person to carry out any activity without having meaning exchanged! Following McCarthy, Matthiessen and Slade's view, I will restrict the following discussion to the meaning expressed in the form of language, exploring in what ways it is conceptualised and defined⁸.

⁸ This, of course, does not mean that meanings conveyed in other modes are less significant. In essence, meaning in our human world exists in a myriad of forms, and technically speaking, it is multimodal. While recent years have witnessed a growing trend in multimodal discourse, following Hasan (2014b, p. 3), I regard language as the central object of enquiry.

2.3 Meanings of ‘meaning’

To study meaning, perhaps the most fundamental question one will ask is *How is meaning defined?* Needless to say, it is not an easy question: like beauty, the interpretations of meaning seem to lie in the eye of the beholder. Scholars have tended to use the word ‘meaning’ in various senses. For instance, Leech (1981, p. 9) views meaning in a linguistic sense, referring it to ‘all that is communicated by language’. Richard (1985, p. 172), by the same token, defines meanings as ‘what a language expresses about the world we live in or any possible or imaginary world’. Bloomfield (1933, p. 139), by contrast, views ‘meaning’ from a sociological point of perspective, viewing it as ‘a situation in which the speakers utter it and response which it calls forth in the hearer’. Some scholars, on the other hands, put fundamental importance on psychological aspect. For example, Nikelas (1988, p. 231) regards meaning as ‘a complex phenomenon involving relationship between a language and the mind of its speakers and practical use to which it is put’. The complexity of the word ‘meaning’ also lies in its slippery nature. In a recent account of semantic key terms, Murphy and Koskela (2010, p. 100) define meaning as follows:

...*meaning* is rarely used as a technical term in semantic study because of its **POLYSEMY** and generality. For example, it may be used to refer to an expression’s **DEFINITION** or **SENSE**, but it may instead be used to include non-denotational aspects of meaning, such as **CONNOTATION**, or to the particular **INTERPRETATION** of the expression’s **REFERENCE** in a particular **CONTEXT**. Where it is used, it is usually because a distinction between sense and reference is not needed in the particular discussion or it is used as a synonym for *sense* or *interpretation* (emphasis origin).

As seen from Murphy and Koskela’s definition, meanings are ‘slippery customers’ in the sense that they can mean different things (p. 100). The slippery nature of meanings is also highlighted by Palmer. As Plamer (1981, p. 3) writes:

The term *meaning* is, of course, much more familiar to us all. But the dictionary will suggest a number of different meanings of *meaning*, or, more correctly, of the verb *mean*, and Ogden and Richards (1923) were able to list no less than sixteen different meanings that have been favoured by 'reputable scholars'.

Obviously, it is difficult to come up with a working definition of meaning at this stage based on the previous scholarly usages because of the ambiguity involved. It appears that the meanings of 'meaning' do depend very much upon the disciplines where the interpretations of meanings are grounded. One way of defining meaning, as suggested by Plamer (1986, p. 5), is to consider the frameworks developed by the academic or other scientific disciplines. Similar to Palmer, Lyons (1995, p. 6) asserts that the investigation of meanings should be grounded in disciplines since the very different meanings of 'meaning' are, in essence, 'interconnected and shaded into one another in various ways'. If the study of meaning is conducted by a philosopher, fundamental importance is probably attached to the logical properties. By the same token, if research on meaning is attempted by a linguist, meaning will probably be defined in its own right. In this sense, discipline is taken as the point of departure for the exploration of meaning. Acknowledging that meaning is 'the meeting place of various cross-current of thinking, and various discipline of study' (Leech, 1981, p. xi), it appears to me that a detailed survey on the approaches to meaning will become a tremendous academic enterprise. In the following section, I will situate myself in one specific discipline *viz.*, linguistics.

2.4 Language and linguistic signs

In linguistics, one approach to conceptualise meaning in language is to view it in terms of signs. Sign takes a variety of forms – words, images, sounds, odours, acts, etc. Language is one kind of sign system for words convey meanings, or more specifically, a linguistic sign. Semiotically, a linguistic sign can be modelled dyadically and triadically.

2.4.1 Saussure's model of linguistic sign: signified and signifier

Pioneered by Ferdinand de Saussure⁹, a seminal Swiss linguist in the twentieth century, Saussure's model of sign is perhaps the most influential one for its revolutionary ideas on the study of language, if not, the modern linguistics. According to Saussure, the study of the 'the life of signs within society' serves as the basis of what he termed as 'semiology', which is concerned with 'what constitutes signs and what laws govern them' (Saussure, 1959, p. 16). For Saussure, linguistics is only one branch of the 'general science of semiology' (de Saussure, 1959, p. 16)¹⁰ and language is a system of signs, or more specifically the linguistic signs. A linguistic sign, in Saussure's view, is dyadic and synthetic, and is composed of a sound image or a 'signifier' (*signifiant*) and a concept or a 'signified' (*signifié*), as shown in Figure 2.2.

As Saussure remarks:

The linguistic sign unites, not a thing and a name, but a concept and a sound-image. The latter is not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression that it makes on our sense. The sound-image is sensory, and if I happen to call it "material", it is only in that sense, and by way of

⁹ In 1916, Saussure's former students Charles Bally and Albert Sechehaye published *Course in General Linguistics* (*Cours de linguistique générale*) based on the notes taken from Saussure's lectures in Geneva.

¹⁰ It should be noted that Saussure's seminal work *Course in General Linguistic* is originally written in French. In this thesis, reference is based on its Wade Baskin's English translation published in 1959.

opposing it to the other term of the association, the concept, which is generally more abstract.

(Saussure, 1959, p. 66, emphasis mine)

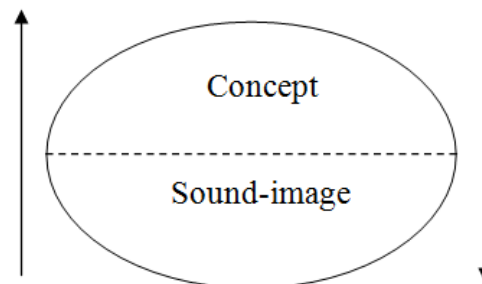


Figure 2.2 Saussure's model of the sign

Important in Saussure's sign model is that a sign is the product of the combination of the two psychological entities – the signifier and the signified. For Saussure, a linguistic sign must entail both the signifier and signified because they 'are intimately united and each recalls the other' (Saussure, 1959, p. 66). In Saussure's writing, the association of the signifier and signified as a sign is typically analogous to 'the two side of a sheet of paper'. As Saussure (1959, p. 113) stresses,

Language can also be compared with a sheet of paper: thought is the front and the sound the back; one cannot cut the front without cutting the back at the same time; likewise in language, one can neither divide sound from thought nor thought from sound...

In other words, if the signifier and signified were to be separated, neither of them would have semiotic significance or could be recognised as a linguistic sign.

One radical characteristic inherited in Saussure's model of sign is arbitrariness, which is

particularly important to the discussion of linguistic signs (For a recent discussion, see Hasan, 2014). In Saussure's view, the choice of the signifier is 'unmotivated' in the sense that it has 'no natural connection with the signified' (Saussure, 1959, p. 69). In other words, the bond between them is not one-to-one link; they are essentially arbitrary. One example of arbitrariness in Saussure's discussion is the signs used in writing, arguing that that the letter *t* has no connection with the sounds that it designated (Saussure, 1959, p. 113).

Another feature which deserves to be noted is the systemicity. For Saussure, the linguistic value of a sign is not defined based on its intrinsic nature or the referent which the sign refers to but 'the simultaneous presence of the others [mine: signified and signifier]' (Saussure, 1959, p. 114). Drawing on the analogy between the game of chess and language, Saussure argues that the value of each linguistic sign depends only on the interplay of signs, just as the value of each chess-piece is dependent on the 'internal' rules of the game as a whole but not the 'external' properties (i.e. whether the chess pieces are ivory or wooden ones). The value of a linguistic sign thus resides in the relations with other linguistic signs in a given language. For example, while the French word *mouton* and English word *sheep* share the same signification, they are, in essence, of different linguistic values because the meat to be served for a meal in English is not *sheep* but *mutton* whereas the French word *mouton* can be used in both senses. In view of it, Saussure's notion of linguistic signs is, in Chandler's (2007, p. 18) words, '*structural* and *relational* rather than *referential*' and is represented as interrelated systems (see Figure 2.3).

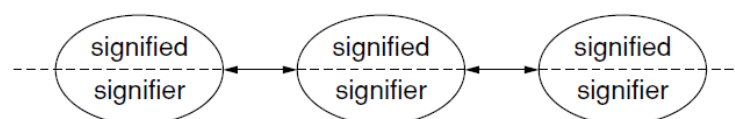


Figure 2.3 Relationality of Saussure's linguistic sign (Saussure, 1959, p.115)

Subsequent development of Saussure's linguistics sign has been taken up by Danish linguist Louis Hjelmslev (1947, 1953, 1959; 1973 and many others)¹¹, who refined and enriched Saussure's notion of linguistic signs in a large extent¹². Like Saussure, Hjelmslev, views the sign as 'the bearer of a meaning', and regards language as a system of signs, or more precisely, a system of the linguistic signs (1953, p. 43). However, what is unique in Hjelmslev refinement is that he places much emphasis on its internal structure and the sign function. For Hjelmslev, each linguistic sign is 'an entity generated by the connexion between an expression and a content'¹³ (1953, p. 47). These two elements, in Hjelmslev's view, can be further divided into 'form' and 'substance', resulting in 'content-substance', 'content-form', 'expression-form' and 'expression-substance'. The content-form and the expression-form stand in a relation of interdependence, and it is the association of these two forms which is regarded as a linguistic sign (Hjelmslev, 1953, pp. 47 - 48).

Viewing linguistic signs internally, Hjelmslev argues that signs are not the ultimate units of sign systems because they are 'decomposable' into minor components, which is known as *figurae*¹⁴ (Hjelmslev, 1947, p. 78). For Hjelmslev, *figurae* are the minimal functional units 'enter[ing] into a sign system as parts of signs' (Hjelmslev, 1953, p. 46). Given that Hjelmslev's linguistic sign are of two planes, *figurae* can be further classified into 'expression-*figurae*' and 'content-*figurae*'; the former denotes the components constituting the expression plane whereas the latter the content plane. In Hjelmslev's view, the expression-*figurae* of language are phonemes, or in his own term 'ceneme' (i.e. containing

¹¹ Originally published in Danish entitled *Omkring Sprogteoriens Grundlæggelse* in 1943, it was then translated into English by Francis, J. Whitfield in 1953.

¹² Subsequent developments of componential analysis in European braches can be witnessed since 1960. See Geeraets (2010, Section 2.3.2) for detailed discussions of these approaches.

¹³ Basically, the terms 'content' and 'expression' correspond to Saussure's notion of 'signified' and 'signifier'.

¹⁴ Hjelmslev elsewhere terms it as 'sign components' (see Hjelmslev, 1959, pp. 114, 175, 234).

no meaning), whereas content-figurae of language are semantics-components, or in his terms ‘pleremes’¹⁵ (i.e. containing meaning).

2.4.2 Ogden and Richards’ model of linguistic sign: semiotic triangle

While Saussure’s model of sign is highly influential in linguistics, it is, of course, not free from criticism. The British linguists C.K. Ogden and I.A. Richards point their accusing fingers to it, arguing that the entire negligence of referent in reality serves as a major drawback (1923, p. 6). Dissatisfied with Saussure’s model, Ogden and Richards (1923) propose a tripartite model of sign, entailing three elements *viz.*, *symbol*, *thought* and *referent*. While the term *symbol* and *thought* are more or less the same as de Saussure’s ‘signifier’ and ‘signified’ respectively, Ogden and Richards regard the referent, the things designated by the symbol as the ‘essential element in the language situation’. These three essential elements, in Ogden and Richards’ view, constitute the semiotic triangle¹⁶ (see Figure 2.4).

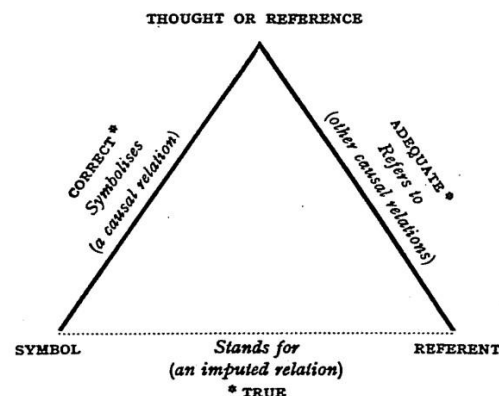


Figure 2.4 Ogden and Richards’ (1923) semiotic triangle

The addition of referent in the Ogden and Richards’ model illustrate one important

¹⁵ As noted by Nöth (1995, p. 71) structural semantics term it as ‘seme’ or ‘semantic components’.

¹⁶ It should be emphasised that the tripartite model of sign is not in itself novel. Other triangular representations includes Aristotle (1984), Frege (1952) and Peirce (1931) etc.; all of which share a high similarity with Ogden and Richard (1923).

implication, *viz.*, referentiality. Whereas Saussure's model is non-materialistic and relational emphasising on the form-concept relation and the interrelations among signs¹⁷, Ogden and Richards' model is more materialistic and referential in the sense that it focuses on the symbol-referent relation. For Ogden and Richards, such a relation is 'indirect' and 'imputed', as indicated by a dotted line in Figure 2.4 (Ogden & Richards, 1923, p. 12). Thus, rather than suggesting directly that the symbol 'dog' stands for a referent, or in their words, a 'certain common object in the street', the symbol must mediate with the mental state of the thinker in a way that it first 'symbolizes' the thought and the thought in turns 'refers to' the referent (Ogden & Richards, 1923, p. 12). Important in this conceptualisation is its strong linguistic association with referential approaches to meaning, which will be discussed in Section 2.5.1.

2.5 Approaches in studying linguistic meaning

Saussure's linguistic sign (i.e. signified-&-signifier) has served as a solid foundation in linguistics, or more specifically, a scientific study meaning in language. This classic model has gained continuous academic momentum, yielding various approaches in meaning studies for different research orientations. In this section, four main linguistic approaches to the study of meaning are reviewed.

2.5.1 A denotational approach to linguistic meaning

The first family of meaning theory is the denotational approach to meaning, conceptualising the notion of meaning as 'meaning in the world' (Cummings, 2005, p. 40). This approach to meaning is 'outward looking' in the sense that it concerns the

¹⁷ Saussure's model is non-materialistic because both the 'sound pattern' and the 'concept' are purely 'psychological'; or in Chandler's (2007, p. 15) words, they are 'non-material *form* rather than *substance*'.

‘informational significance’ of language - the aboutness of the linguistic expressions (Chierchia & McConnell-Ginet, 2000, p. 12). By orienting to what linguistic expressions are about, the referential approach to meaning concerns the relation between the linguistic sign and the referent to which the linguistic expression refers (also known as *denotation*, *denotatum*, *reference*, and *semantic value*). By ‘referential semantics’, it focuses on the relation between ‘language and the world’ (Frawley, 1992, p. 18), viewing referent as the ‘core’ component of the meaning of a linguistic expression (Riemer, 2010: 25, see also Saeed, 2003 and many others). This is not surprising because referentiality is one of the human basic needs, that is, to refer to some discrete objects in the external reality and name them concomitantly. If we view it from the semiotic triangle discussed above, this approach resides in the symbol-referent relation. In this sense, meaning is simply regarded as meaning-as-reference, referring to the objects in the world without any consideration of the psychological states of our minds (Frawley, 1992, p. 18), or in Allen’s (1986: 77) technical formulation, ‘the meaning of an expression E is its ostension (= picking out) of a denotatum D in the world W’. For instance, the meaning of the common noun *dogs*, in the referential sense, will refer to the real world entities entailing the observable features such as furriness, barking and faithfulness.

2.5.2 A philosophical approach to linguistic meaning

By philosophical approaches, I refer particularly to those studies in the tradition of linguistic philosophy, or more precisely, ordinary language philosophy (cf. analytical philosophy). Viewed from a philosophical point of view, this approach aims to study the meaning in relation to the way people communicate effectively, or in Leech’s (1981: 22) words, to understand ‘the relation between meaning, intention and interpretation’. At the

base of the ordinary language philosophy is Austin's (1962) speech act theory, which is further developed by Searle (1965, 1969, 1976, 1979).

Pioneered by the British philosopher, J. L. Austin, speech act theory aims to classify spoken language in terms of the 'functional values' rather than 'forms' of the utterances (Austin, 1962; see also Searle, 1969, 1976). Prior to speech act theory, it is a general belief in the philosophical and logic traditions that a statement is 'constative' (Austin, 1962, p. 3), that is, the function of a statement is to give a true or false description of the reality. However, recognising that there are numerous utterances which do not describe things but perform actions, Austin proposes his own account of utterances *viz.*, speech act theory, where the function of a statement is 'performative', more specifically, 'the issuing of the utterance is the performing of an action – it is not normally thought of as just saying something (Austin, 1962, p. 6 – 7). Actions performed by these utterances are regarded as speech acts.

Austin further illustrates that the philosophical study of meaning of a speech act lies in a combination of three senses, *viz.*, locutionary act, illocutionary act and perlocutionary act. Locutionary act is concerned with the *linguistic meaning* associated with the words, which is "roughly equivalent to 'meaning' in the traditional sense" (Austin, 1962, p. 108). For example, the utterance '*It's hot in this room*' denotes the linguistics meanings, or more specifically, the conceptual meanings, talking about the high temperature of the room. Illocutionary act, by contrast, concerns the *intended meaning* of the speaker. It is conventional in the sense that it carries 'certain (conventional) force' (Austin, 1962, p. 108). In this sense, the meaning of the utterance '*It is hot in this room*' could be interpreted as an indirect request, with the intended meanings '*I wish someone would open the window for*

me'. The relation of locutionary act (x) and illocutionary act (y) can be conceptualised as follows: 'In saying *x* I was doing *y*' or 'I did *y*' and 'By saying *x* I did *y*' or 'I was doing *y*' (Austin, 1962, p. 121). Finally, perlocutionary act is the 'achieving of certain effects' of saying something (Austin, 1962, p. 120). Having issued the utterance '*It is hot in this room*', the utterance could result in someone opening the air-conditioners. In this sense, the meaning of the utterance '*It is hot in this room*' could be interpreted as an indirect request, with the intended meanings '*I wish someone would open the window for me*'. The relation of locutionary act (x) and illocutionary act (y) can be conceptualised as follows: 'In saying *x* I was doing *y*' or 'I did *y*' and 'By saying *x* I did *y*' or 'I was doing *y*' (Austin, 1962, p. 121). Finally, perlocutionary act is the 'achieving of certain effects' of saying something (Austin, 1962, p. 120). Having issued the utterance '*It is hot in this room*', the utterance could result in someone opening the air-conditioners.

While it is beyond doubt that Austin's pioneering work serves as the foundation of speech act theory, this philosophical approach to utterance meaning has caught on, revised and expanded phenomenally by the American philosopher J. R. Searle. As a major proponent of speech act theory, Searle (1969) aims to explain illocutionary acts in narrow sense. Inheriting Austin's (1962) ideas, Searle (1969) elaborates and develops the theory in his own fashion, concerning the constitutive rules which govern the issuance of illocutionary acts. According to Searle, constitutive rules are crucial in performing an illocutionary act for 'talking is performing acts according to rules' (1969, p. 22). Searle proposes four constitutive rules, based on the abstraction of all the conditions 'necessary and sufficient for the act to have been successfully and non-defectively performed in the utterance of a given sentence' (Searle, 1969, p. 54). These four essential rules are *propositional content rule*, *preparatory rule*, *sincerity rule* and *essential rule*, each of which contains its own

essential conditions. The specification of these rules in relation to the illocutionary act *question* is reproduced as in Table 2.1. In a Searlean sense, to successfully count an utterance as a question, one needs to satisfy all the conditions listed in the constitutive rules.

Table 2.1 Constitutive rules of questioning (adapted from Searle, 1969, p.66)

Types of rule	Illocutionary act: Questions
Propositional context	Any proposition or propositional function.
Preparatory	1. The speaker does not know ‘the answer’, i.e., does not know if the proposition is true, or, in the case of the propositional function, does not know the information needed to complete the proposition truly (but see comment below). 2. It is not obvious to both the speaker and the hearer that the hearer will provide the information at that time without being asked.
Sincerity	The speaker wants this information.
Essential	Counts as an attempt to elicit this information from the hearer.

In addition to developing constitutive rules, Searle (1976) also acknowledged the problems in Austin’s taxonomy of illocutionary acts, suggesting that a further revision on classification is needed¹⁸. Taking ‘illocutionary point and its corollaries, direction of fit and expressed sincerity conditions’ as the points of departure (Searle, 1979, p. 354), Searle classifies illocutionary speech acts into five categories, which are summarised in Table 2.2.

¹⁸ In Austin’s (1962) taxonomy, illocutionary acts are classified into five general classes: verdictives, exercitives, commissives, behabitives and expositives. Indeed, both Austin and Searle are well aware of the difficulties in classifying illocutionary acts. Though Austin (1962) has offered a tentative classification, he himself is not satisfied with it. As Austin writes, ‘I [Austin] am not putting any of this forward as in the very least definitive’ (Austin, 1962, p. 151). Similarly, Searle (1979) has identified at least six difficulties in Austin’s taxonomy, namely (1) persistent confusion between verbs and acts; (2) not all the verbs are illocutionary verbs; (3) there is too much overlap of the categories; (4) there is too much heterogeneity within the categories; (5) many of the verbs listed in the categories do not satisfy the definition given for the category; and (6) there is no consistent principle of classification (For a detailed discussion on the weaknesses in Austin’s taxonomy, see Searle, 1979, p. 350 – 354).

Table 2.2 Searle's (1979) taxonomy of illocutionary acts

Classes of illocutionary acts	Descriptions (based on Searle, 1979)
Representatives	Illocutionary acts that 'commit the speaker (in varying degrees) to something's being the case, to the truth of the expressed proposition' (Searle, 1979, p. 354). Paradigm cases include asserting, suggesting, concluding etc.
Directives	Illocutionary acts that 'get the hearer to do something' (Searle, 1979, p. 355). Paradigm cases include requesting, permitting, questioning etc.
Commissives	Illocutionary acts that 'commit the speaker (again in varying degrees) to some future course of action' (Searle, 1979, p. 356). Paradigm cases include promising, threatening, offering etc.
Expressives	Illocutionary acts that 'express the psychological state specified in the sincerity condition about a state of affairs specified in the propositional content' (Searle, 1979, p. 356). Paradigm cases include thanking, apologising, welcoming, congratulating etc.
Declarations	Illocutionary acts that 'effect immediate changes in the institutional state of affairs and which tend to rely on 'elaborate extra-linguistic institutions' (Searle, 1979, p. 359). Paradigm cases include excommunicating, declaring war, christening, etc.

2.5.3 A descriptive approach to linguistic meaning

By 'descriptive linguistics', I particularly draw on Leech's seven types of meaning. For Leech, meanings of meaning, in the widest sense, is known as 'communication value', and is classified into seven types. They are 'conceptual meaning', 'connotative meaning', 'social meaning', 'affective meaning', 'reflected meaning', 'collocative meaning' and 'thematic meaning'.

2.5.3.1 *Conceptual meaning*

Conceptual meaning, (*a.k.a.* logical, cognitive or denotative meaning), refers to the communicative value an expression has by virtue of what it refers to the pure ideational content. As suggested by Leech, conceptual meaning is objective and stylistically neutral, translating the conceptual features of the referent into real world attributes (Leech, 1981, p. 12). More specifically, it is through this specification of semantic features which distinguishes one referent from one another. For example, given that the conceptual meaning of the word *woman* entails the semantic features [+HUMAN], [-MALE] and [+ADULT], the referent being referred to must entail the attributes of ‘human’, ‘female’ and ‘adult’; and it is these features which distinguish it from the word *boy*, which could be specified as [+HUMAN], [+MALE] and [-ADULT] (Leech, 1981, p. 10).

Important in conceptual meaning is its fundamental significance in human communication, or in Leech’s words, the ‘inextricable and essential part’ in human language (Leech, 1981, p. 11). As Leech (1981, pp. 12 - 13) remarks:

... one can scarcely define language without referring to it [mine: conceptual meaning]. A ‘language; which communicated by other means than by conceptual meaning (e.g. a ‘language’ communicated solely by means of expletive words like *Oh! Ah! Oho! Alas!* and *Tally ho!* would not be a language at all in the sense in which we apply the term to the tongues of men.

For Leech, human language is as it is for it could express conceptual contents; any language which fails to convey ideational content is essentially ‘in common perhaps with animal communication than with the rest of human language’ (Leech, 1980, p. 20). Given the fundamentality of conceptual meaning in human language, Leech gives primacy to it;

coining it as the core meaning in human language where the other six types are peripheral.

2.5.3.2 Connotative meaning

Contra conceptual meaning, connotative meaning emphasises on the communication value which is ‘*over and above* its purely conceptual content’ (Leech, 1981, p. 12). In other words, instead of considering the referent criterially, connotative meaning extends its concerns to the ‘additional, non-criterial properties’ that a language user would expect the referent to associate with (Leech, 1981, p. 12). Central to this extension is that meaning becomes considerably variable and open-ended. Connotative meaning, as Leech argues, varies according to individual (including their age and experience) as well as society, cultural and even historical period. In this sense, any subjective or objective characteristics of a referent may contribute to the connotative meaning (Leech, 1981, p. 13). For example, whereas *woman* associates connotatively with the meanings like ‘gentle’, ‘compassionate’ and ‘sensitive’ in today’s societies, its connotative meaning within the speech community in western societies hundreds years ago was ‘non-trouser-wearing’ (Leech, 1981, p. 12).

2.5.3.3 Social meaning

Whereas conceptual meaning and connotative meaning attach fundamental importance to the ‘real world’ experience associated with an expression, social meaning concerns the ‘situation where the expression takes place’ (Leech, 1981, p. 14), denoting the communication value an expression has by virtue of what it refers to the ‘social circumstances of its language use’ (Leech, 1981, p. 14). Leech argues that any use of language in communication is situation-dependent, and one could decode the social meaning, or more specifically, the socio-stylistic dimensions based on the language use. Drawing on Crystal and Davy’s (1969) work on stylistics, Leech suggests that an

expression could convey a multitude of stylistic meanings, including DIELECT, TIME, PROVINCE, STATUS, MODALITY, SINGULARITY to name but a few. For instance, whereas both *mother* and *mom* refer to a female parent conceptually and are typically regarded as synonymy, its social meanings are essentially different – the former denote a high level of formality while the latter is more colloquial.

2.5.3.4 Affective meaning

Affective meaning, by contrast, is the communication value concerning the emotion invoked in the language, or in Leech's words, 'how the language reflects personal *feelings* of the speaker, including his *attitude* to the listener, or his attitude to something he is talking about' (Leech, 1981, p. 15; emphasis mine). Important in affective meaning is its largely 'parasitic' nature (Leech, 1981, p. 16). That is to say, the attitudinal expression resides in the mediation of other meanings categories¹⁹, such as conceptual, connotative and stylistic (Leech, 1981, p. 16). For example, the impression of politeness invoked in the utterance '*I'm terribly sorry to interrupt, but I wonder if you would be so kind as to lower your voices a little*' relies upon on the conceptual contents of the words used (i.e. *terribly sorry*, *wonder* and *a little*) and style (i.e. intonation of a mild request).

2.5.3.5 Reflected meaning

Unlike social and affective meanings which are related to the situation where an utterance takes place, reflected meaning lies in the 'interconnection on the lexical level of language' (Leech, 1981, p. 16). As defined by Leech, reflected meaning refers to 'the meaning which arises in cases of multiple conceptual meaning' and particularly, "one sense of a word

¹⁹ 'By 'typical', one should not ignore the others means in communicating affective meanings. One example of such is injection i.e. *Aha!* and *Yippee!*, which requires no mediation of other meaning categories. For details, see Leech (1981, p. 16).

seems to 'rub off' on another sense" (Leech, 1981, p. 16). An often-cited example of reflected meaning is Leech's (1981, p. 16) '*The Comforter*' and '*The Holy Ghost*' – both of them refer to the Third Person of the Trinity in church service. While the 'comfort' in '*The Comforter*' and the 'ghost' in '*The Holy Ghost*' have no literal association with the Third Person of the Trinity, the everyday meanings of these two parts have the tendency to form parts of our response to it. For example, the 'comfort' in '*The Comforter*' is reminiscent of the reflected meaning of 'warm and comforting'; whereas 'the 'ghost' in '*The Holy Ghost*' may call to mind the reflected meaning of 'dreadful' (Leech, 1981, p. 16). In other words, the everyday senses of 'comfort' and 'ghost' 'rub off' on the sense of the Third Person of the Trinity, thus interfering with its literal meaning.

2.5.3.6 Collocative meaning

Collocative meaning, as defined by Leech (1981, p. 17), 'consists of the associations a word acquires on account of the meanings of words which tend to occur in its environment'. That is to say, it is the communication value which extends *over* and *above* the conceptual meaning of an individual word, and to the association of expressions with which they are habitually co-occurring. A well-known example is the gender-specific connotations of *pretty* and *handsome*. Granted that both words denote the same conceptual meaning of 'good-looking', there is a general tendency that *pretty* co-occurs with words denoting female²⁰ (e.g. girl, women, flower) and *handsome* with words denoting males (e.g. boy, man, car).

²⁰ By 'general tendency', it, of course, does not mean that the collocation *handsome woman* is not unacceptable. As Leech (1981, p. 17) notes, the range of *pretty* and *handsome* could overlap with 'female', resulting in *pretty woman* and *handsome woman*. However, the kind of attractiveness suggested in these collocative meanings is different. For example, the collocation *handsome woman* might suggest a kind of attractiveness of woman in a mannish way.

2.5.3.7 Thematic meaning

The final category of meaning that Leech (1981) has distinguished is thematic meaning – it is the communication value arising out of ‘the way in which a speaker or writer *organises* the message, in terms of *ordering*, *focus* and *emphasis* (Leech, 1981, p. 19, emphasis mine). For Leech, even though messages share the same conceptual meaning and the same truth conditions, the different ways in organising message could result in somewhat different thematic meanings, and one needs to acknowledge the fact that such messages will not be ‘equally appropriate within the same context’ (Leech, 1981, p. 19). Consider the following examples:

(1) Mrs. Bessie Smith donated the first prize

(2) The first prize was donated by Mrs. Bessie Smith.

Leech argues that while messages (1) and (2) share the same ideational content and truth condition, the active voice construction in (1) seems to answer the implicit question ‘What did Mrs. Bessie Smith donate’ whereas the passive voice construction in (2) seems to answer the question ‘Who donated the first prize’. The different thematic meanings in (1) and (2) suggest two different contexts – we know who Mrs. Bessie Smith is in message (1) but not in message (2). Table 2.3 summaries the seven types of meaning.

Table 2.3 Leech's (1981, p. 23) seven types of meaning

Leech's (1981) seven types of meaning		
1. Conceptual meaning or <i>Sense</i>		Logical, cognitive or denotative content
Associative meaning	1. Connotative meaning	What is communicated by virtue of what language refers to
	2. Social meaning	What is communicated of the social circumstances of language use
	3. Affective meaning	What is communicated of the feelings and attitudes of the speaker/writers
	4. Reflected Meaning	What is communicated through association with another sense of the same expression
	5. Collocative meaning	What is communicated through association with words which tend to occur in the environment of another word
6. Thematic meaning		What is communicated by the way which the message is organised in terms of order and emphasis

2.5.4 A functional approach to linguistic meaning

By 'functional approach', I refer to the front of investigation situated in the Systemic Functional Linguistics (SFL). Within this approach, the first question we should ask is *In what ways do we conceptualise meaning in the form of language from a functional perspective?* In addressing this question, I turn to Hasan (2009b [1988], 2009i [1989], 2009l [1990], 2009g [1991]), where she categorises the theoretical approaches to meaning into two opposing groups, namely, externalist approach and internalist approach.

2.5.4.1 Meaning in language: the externalist approach

One lens in studying meaning in language in SFL is to view it as a 'means to understanding and/or expressing already existing social relations and processes', which is glossed as

externalist approach (Hasan, 2009b [1988], p. 133). Hasan (2009b [1988], p. 134) further elaborates:

When language is assigned a subsidiary role so that it is simply a means to understanding or expressing something, then it is logically implied that the thing to be understood or expressed is independent of language, *that language has played no part in bringing about the existence of this thing*. If the word 'meaning' is glossed as that which is understood or expressed through the use of signs, then obviously in the approach under discussion, *meaning must remain external to language*, since language is simply a secondary flow of expressions. I will refer to this as the externalist approach (emphasis mine).

In the externalist approach, language is perceived as 'an inventory of names', labelling the pre-existing phenomena based on their clearly recognisable identities (Hasan, 2009b [1988], p. 135). In other words, entities exist prior to language and meaning is independent of language. What language functions is to simply express the meanings of such entities. In most linguistic models where the externalist approach is assumed, such meanings are glossed as 'referential meaning', which is sometimes termed as 'cognitive meaning' or 'representational meaning'. For instance, 'mountain' is to be understood because of its physical existence and the meaningfulness of language in this case simply reflects the pre-existing reality i.e. the specific identities which are independent of language such as a raised part of the Earth's surface which is much larger than a hill.

Of course, this externalist approach to meaning is not free from criticism (see Hasan, 2009b [1988], 2009l [1990]; Hjelmslev, 1988[1953]; Saussure, 1959' Whorf, 1956). Perhaps, the most critical issue, as stated by Hasan (2009b [1988]) is that language is restricted to the 'subsidiary role' in socialisation. With this conception of meaning, language becomes only

‘contentful’ when it corresponds to some extra-linguistically physical existents. Meaning in language is thus conceptualised as a form of ‘transcendental signified’ and has no place in the ‘creation, maintenance, and alteration of social relations structures processes’ (Hasan, 2009b [1988], p. 135).

2.5.4.2 Meaning in language: the internalist approach

Contra externalist approach, internalist approach takes a constitutive view in ‘meaning in language’, which is abundantly evident in literature (Hasan, 2009b [1988]; see also Hjelmslev, 1953; Malinowski, 1923, 1935; Whorf, 1956). As Hasan (2009b [1988], p. 136) writes:

We need, instead, an approach that is capable of doing two seemingly disparate things at once: first, *we need to show that meanings are the very artifact of language, and so are internal to it*; and secondly, that these linguistically created meanings nonetheless *pertain to our experience of the world around us and inside us*, giving this experience an intersubjective objectivity which forms the basis for our perception of the possible and the impossible, the same and the different, the appropriate and the inappropriate, the coherent and the incoherent (emphasis mine).

In the internalist approach, meaning in language is not simply a ‘mirror’ of the physical existents but remains ‘a language internal fact’ in the sense that language, or more precisely lexicogrammar, plays an active role in creating the realms of reality (Hasan, 2009l [1990], p. 78). With this conception, it follows that every language has semantics and is unique in some aspects to that language (Hasan, 2009l [1990], p. 79). The constitutive view extends further to ‘language in reality’ where language takes on a constitutive role in construing

some ‘socially significant aspects of the world that impinge on human experience’ (Hasan, 2009l [1990], p. 78). In other words, language shapes the reality. Putting these constitutive views together, language, meaning and reality are inextricably connected so that (i) meanings are linguistically created by language; (ii) language shapes of reality and (iii) reality is defined with reference to linguistic meanings.

2.6 Characterizing the approaches to meaning: a view from Discourse Analysis (DA)

Promising these approaches are, they, in actual practice, have never been immune from criticism. Hasan (2009g [1991], p. 234 - 235) elsewhere has illustrated the frameworks of analysing meaning, even after nearly a century of modern linguistics, are still illusive, thus posing problems in meaning analysis. While she has attempted to compare the types of meaning across disciplines, it appears to me that her comparison is one-dimensional, prioritising only the types of meaning without addressing the dimensions relevant to discourse analysis (see Hasan, 2009g [1991] for a comparison).

Granted that this current thesis is a discourse study, the most pressing issue appears to be *In what ways these approaches are relevant to the study of meaning from the perspective of Discourse Analysis (DA)?* In answering this question, one approach is to characterise the aforementioned traditions multidimensionally, namely (i) unit scale (i.e. a rank scale of meaning ordered in *word – group/phrase – clause – message – text*) and (ii) cline of contextulisation (i.e. a continuum moving from the most decontextualised pole to the most contextualised one) and (iii) mode of meaning (i.e. a typology of meaning in a language). Cross-cutting these three dimensions constitute a map of linguistic meaning, illustrating not only the interrelation between among the various approaches, but also their limitations in

discourse studies (see Figure 2.4). Generally, this discorsal limitation fall under four categories, namely (i) *orders of meaning*, (ii) *types of meaning*, (iii) *meaning as theory; meaning as description* and (iv) *SFL, discourse analysis and meaning*.

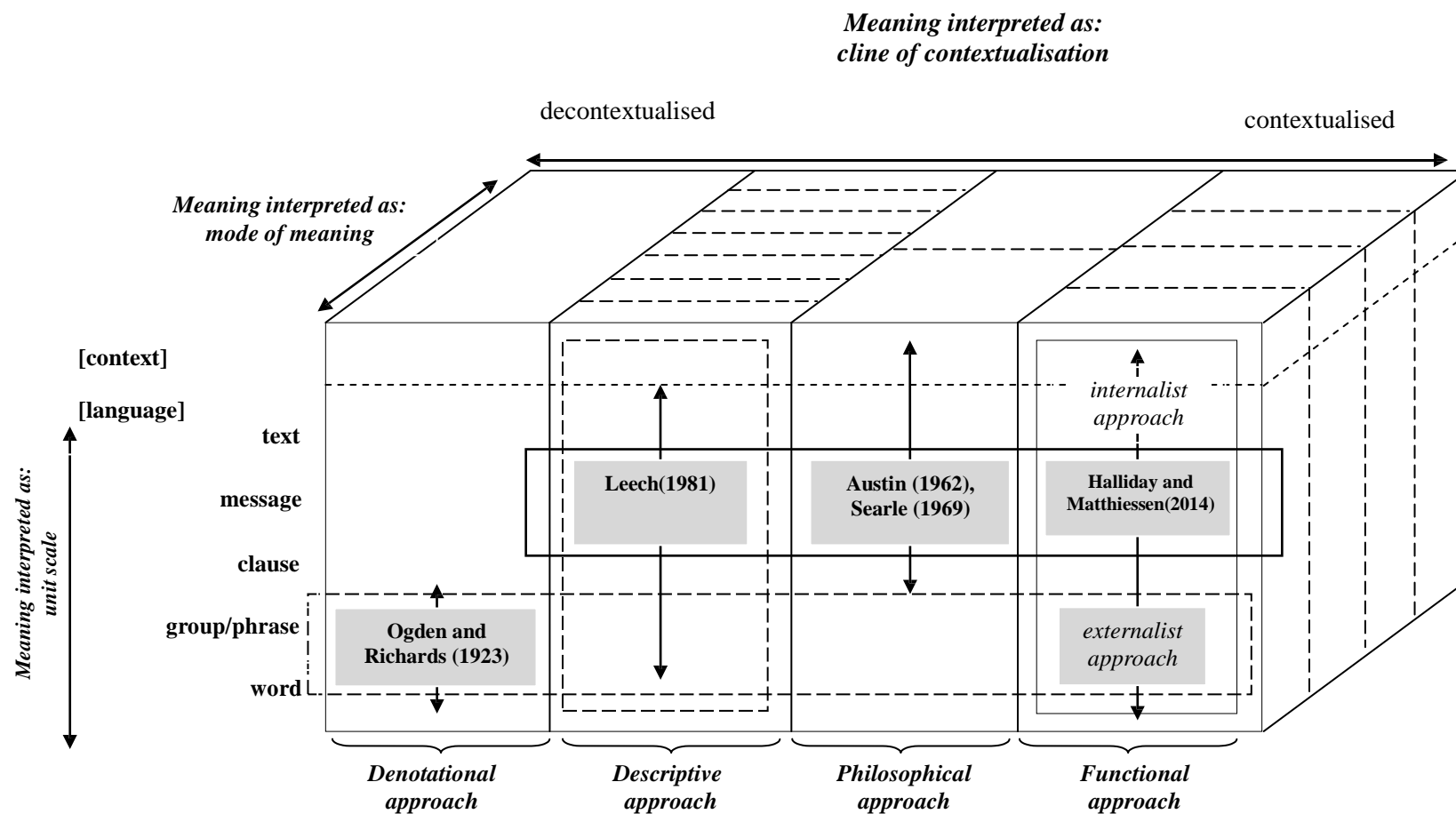


Figure 2.5 Locating the approaches of meaning studies in terms of (i) unit scale, (ii) contextualisation and (iii) spectrum of meaning

(i) Orders of meaning

Like other linguistic phenomena, meaning is organised in terms of constituency so that meaning expressed in each rank represents different orders of meaning in a text/discourse. Generally, the meaning approached by referential semanticists tend to be of lower-order of abstraction, focusing only on the lower-ranking unit such as *word* and, in some occasions, *group/phrase*. This contrasts with those linguists in other three traditions who *typically* take higher-ranking meaning unit as their objects of enquiry, investigating the meaning potential in the level of *clause*, *message* and *text/discourse*. From a discourse analytical point of view, the mere focus on lower-ranking unit in referential semantics is less favourable in doing discourse analysis, simply because meaning in discourse, in Halliday's (1994, p. xvii) word, is always concerned with the 'entire system of meanings of a language' (see also Coulthard, 1985; Fairclough, 1989 and Eggins & Slade, 2004).

(ii) Types of meaning

Contra descriptive and functional approach, the centrality of meaning in philosophical tradition resides *mostly* in the 'worded meaning' of an implicature or in SFL term, the interpersonal meaning (Hasan, 2009g [1992], p. 237). This is, perhaps, not surprising because language users have to conduct implicature analysis through re-construing the intended meaning based on the speaker's wordings in context (Hasan, 2009g [1992], p. 237). This contrasts with those descriptive and functional linguists who expand the type of meaning to cover the various

communication needs, as in Leech's seven types of meaning and Halliday's three modes of meaning (Caffarel *et al.*, 2004, p. 31). The strong emphasis on denotational meaning in pragmatics, like referential semantics, is thus less favourable in discourse analysis.

(iii) Meaning-as-theory; meaning-as-description

Granted that Leech's and Halliday and Matthiessen's meaning typology are comparable, their inherited conceptions are totally different (see Table 2.4). In my view, Leech's seven types of meanings is more or less descriptive – it is a typology of meaning potential, or in his word, the 'seven different ingredients' in the system of English. *Contra* Leech, Halliday's three modes of meaning (i.e. ideational meaning, interpersonal meaning and textual meaning) are theoretical; it *theorises* language as three 'highly generalised functions', each of which represents the three metafunctional meanings *in any languages* (Caffarel *et al.*, 2004). In view of this, a (systemic) functional approach to meaning appears more promising in this current study, for it enables us to explore meanings in the system of Cantonese.

Table 2.4 summarises the comparison of the various types of meanings with respect to the three metafunctional meanings in SFL.

Table 2.4 Modes of meaning according to metafunctions (Matthiessen, personal communication)

Metafunction		Mode of meaning	Ogden and Richards (1923)	Austin (1962), Searle (1969)		Leech (1981)
ideational	logical	construing experience				
experiential			referential meaning, cognitive meaning, denotation	semantics	reference; sense	conceptual meaning (sense)
interpersonal		enacting roles & relations	connotation	pragmatics	speech act	connotative; affective; social [in consideration of tenor]
textual		creating discourse flow	—			thematic meaning

NB: Leech's "reflected meaning" and "collocative meaning" are not metafunctional modes of meaning but are rather other aspects in the construction of meaning.

(iv) Context and meaning

The final point that deserves to be noted is degree of contextualisation, or more specifically, the interrelation between meaning and context. *Contra* denotational and descriptive approach, philosophical and (systemic) functional one place much emphasis on context in the process of meaning-making. Yet, it is the later one which entails metafunctionally-regulated meanings that calibrate context, semantics and lexicogrammar cross-stratally (see Chapter 3 for a detailed discussion).

Based on the above observations, it appears to me that a (systemic) functional approach to meaning is particularly relevant to this study. More specifically, *'linguistic meaning' per se is theoretically motivated and is conceptualised as a cross-stratal calibration (i.e. context, semantics and lexicogrammar) of any given language in which its metafunctionally-regulated meanings are always functioning in context.* Elsewhere, I have enumerated the intrinsic

relation between Discourse Analysis and SFL in studying meaning. As reported in Fung and Low (in press), discourse studies featuring SFL as the major analytical framework has gained wide acceptance in the past decades, yielding a number of approaches and discourse tools in doing discourse analysis. Table 2.5 summarises these research approaches and semantic descriptions.

Table 2.5 Approaches of semantic descriptions in SFL (Adopted from Fung and Low, in press)

Research orientations	Discourse analytical tools
	- COHESION (e.g. Halliday and Hasan, 1976)
Text texture	- COHESIVE HARMONY ANALYSIS (Hasan, 1984)
	- SOCIOLOGICAL SEMANTIC NETWORKS (Halliday, 1973, Turner, 1973)
Sociolinguistics and semantic variation	- MESSAGE SEMANTIC NETWORKS (e.g. Hasan, 1983; Hasan, 1996b; Hasan, 2009j; Hasan <i>et al.</i> , 2007)
	- RHETORICAL UNIT ANALYSIS (e.g. Cloran, 1994, 1999)
Discourse structure in constituency terms	
	- RHETORICAL STRUCTURE THEORY (e.g. Halliday and Matthiessen, 2006, Matthiessen, 1988, 2004)
Discourse structure in dependency terms	
	- PHASAL ANALYSIS (e.g. Gregory, 1985)
Discourse structure in phasal terms	
	- SPEECH FUNCTION NETWORKS (e.g. Eggins and Slade, 2004; Halliday, 1984; Martin, 1992; Matthiessen, 1995)
Collaborative and interactive exchange of dialogue	
	- IDEATION, - CONJUNCTION, - NEGOTIATION, - INVOLVEMENT, - APPRAISAL, - IDENTIFICATION and

Lack of space prevent a full rehearse of these descriptive frameworks. It is sufficient to point out that the strong tradition of SFL in DA serves as a power discourse analytical tool in analysing meaning, or in Halliday's (1994, p. xxii) word, to interpret and make sense of 'what people say and write and listen to and read'.

2.7 Chapter Summary

This chapter has successfully demonstrated one phenomenon – *the meanings of meaning are always 'slippery', with the diversity being a product of divergent disciplines, different points of interest, and various theoretical traditions*. In this current study, meaning is conceptualised from a SFL perspective. More specifically, it refers to the internalist approach where meaning is perceived as a cross-strata construct of post-infancy human language, encompassing contextual, semantic and lexicogrammatical meanings (Halliday & Greaves, 2008, p. 62). *Contra* other approaches where meaning is not deemed as a part of the linguistics proper; a functional, internalist approach conceptualises meanings as 'the very artefact of language' (Hasan, 2009b [1988], p. 136). In SFL, they are organised under the notions of metafunction across strata – one of the semiotic dimensions of the 'architecture of language' (Halliday and Matthiessen, 2014, p. 54).

Chapter 3

SYSTEMIC FUNCTIONAL LINGUISTICS

3.1 Introduction

The approach to discourse analysis adopted in this present study is *Systemic Functional Linguistics* or *SFL* for short, a linguistic theory developed by M. A. K. Halliday and his colleagues. To illustrate the theoretical foundation of this theory of language, Chapter 3 is organised into six sections. Instead of moving directly to the architecture of language, Section 3.2 will commence with a review of the research needs in applying SFL as discourse analytical framework, thus setting up the theoretical backdrop of this project. Section 3.3 and 3.4 then offer a comprehensive overview on the semiotic dimensions of languages, addressing the issue of what order of system a language is. Section 3.5 and 3.6 are more concerned with the notion of ‘context’. In particular, a link between *context* and *register* and will be drawn so that a theoretical argument can be derived to the analysis of *patient journey*. In response to analysing patient journey as register, Section 3.9 will demonstrate how the situation type is mapped both cartographically and descriptively under the Hallidayan tradition.

3.2 Why Systemic Functional Linguistic (SFL)

3.2.1 SFL as a general linguistic theory

Pioneered by Halliday and his colleagues in early 1960s, SFL has been developed as a general theory of language. This model of language argues a basic distinction between ‘theory’ and ‘description’, emphasising that the theory *per se* is an ‘account of language in *general*’ whereas the description itself is an ‘account of the system of a *particular*

language’ (Halliday & Matthiessen, 2014, p. 55 emphasis in origin). While descriptions have sometimes been misunderstood as having a ‘heavy anglocentric bias’, SFL is, indeed, general – functional linguists treat each given language ‘in its own right’ instead of as the variant of English or Latin, illustrating the particular characters of each language in their comprehensive accounts in general and specific senses (Caffarel *et al.*, 2004a, p. 7). The past decade has witnessed a significant expansion of systemic functional descriptions, including French (Caffarel, 2004, p. 149), German (Steinr & Teich, 2004), Tagalog (Martin, 2004), Vietnamese (Thai, 2004), Mandarin Chinese (Halliday & McDonald, 2004), Japanese (Teruya, 2004), Telugu (Prakasam, 2004) and Pitjantjatjara (Rose, 2004), covering seven language families (see Teruya & Matthiessen, 2015 for a recent discussion). The experience gained from these studies has laid a solid foundation in this study. On the one hand, SFL – a general linguistic *theory* – entails a strong ‘applicability’ which enables us to apply it in any languages in any contexts, which is, in this case, Cantonese doctor – patient interaction. On the other hand, its strong *descriptive* generalisation allows us to characterise the lexicogrammatical realisations of Cantonese message semantics.

3.2.2 SFL as a social semiotic theory

In addition to being a general linguistic theory, SFL is essentially ‘social semiotic’. As a ‘social semiotic’ theory, this linguistic theory attaches fundamental importance to two core concepts *viz.*, ‘society’ and ‘semiotic’ (Halliday, 1994; Halliday and Hasan, 1985; Halliday and Webster, 2009; Hasan *et al.*, 2005; Hasan *et al.*, 2007). The idea that ‘language as a semiotic’ is not in itself novel; it has a long history which can be traced back to the work by Ferdinand de Saussure. Indeed, SFL, being a ‘post-Saussurean linguistic theory’ (Hasan, 2014a, p. 107), has adapted most of the conceptions inherited in Saussure’s linguistic

theory but with refinements (Hasan, 2009m; Hasan, 2013, 2014a). The notable distinction lies in the treatment of *langue* and *parole*²². For Saussure, *langue* and *parole*, though interdependent, are regarded as ‘two absolutely different things’ (Saussure, 1959, p. 19) because *parole* is not systemisable and thus cannot be studied comprehensively. As a result, fundamental importance is only attached to *langue*.

Halliday and other functional linguists, by contrast, accommodate both *langue* and *parole* in conceptualising language (Firth, 1957; see also Halliday, 2008; Hasan, 2009m, 2013, 2014a)²³. *Langue* and *parole*, in a systemic functional sense, are viewed as one set of phenomena and they differ from each other only in terms of the position taken by the observer. The broadening from ‘*langue*’ to ‘*langue* and *parole*’ are important – language is by no means ‘purely semiotic’ (Hasan, 2013, p. 272) but essentially ‘social semiotic’ since *parole* cannot exist without social context (Hasan, 2009m, p.11). In other words, language is regarded as ‘a form of activity of human being in societies’ (Halliday *et al.*, 1964, p.4), or more specifically, a realisation of human behaviour potential’ (Halliday, 1973, p. 64) which is ‘*always* and only *done* in society’ (Hasan, 2005, p. 56 emphasis origin). Given that language is conceptualised as a social semiotic, SFL can thus be regarded as a social semiotic theory – a theory emphasising the ‘reciprocal relations of language and society’ (Hasan, 2013, p. 274). A theory of this kind thus allows us to understand ‘the nature of the relationship between language and society’, appreciating ‘why and how language works’ (Hasan, 2005, p. 56).

²² According to Saussure, *langue* regarded as an abstract language system, or more specifically, ‘a system of signs in which the only essential thing is the union of meanings and sound-images, and in which both parts of the sign are psychological (1959, p. 15), whereas *parole* denotes the specific instances of language in use in a given speech community, or ‘the executive side of speaking’ (1959, p. 13).

²³ In recent discussions on Saussure’s conception of language, Hasan (2013, 2014a, 2014b) has pinpointed that the exclusion of *parole* in language is ‘bound to fail’ because it is incapable to provide a comprehensive account of the sign and its value Hasan (2013, p. 272).

3.2.3 SFL and social accountability

Another remarkable feature that deserves to be noted is that SFL places much emphasis on the ‘social accountability’ (Halliday, 2006; Mahboob & Knight, 2010a, 2010b; Matthiessen, 2012, 2014). Early in 1960s, Halliday (1964) has been arguing that a theory of language should be ‘consumer-oriented’. As Halliday (2006, p. 19) writes in his recent account:

I have always tried to work with a functional orientation to language; not eschewing theory, because *without theory there can be no consistent and effective practice, but treating a theory as a problem-solving enterprise and trying to develop a theoretical approach, and a theoretical model of language, which can be brought to bear on everyday activities and tasks*. I call this an ‘applied’ linguistics’ (emphasis mine).

That is to say, it is a linguistic theory committed to solving the problems encountered by language users in their daily social practices (Halliday, 2008, p. 189). From a systemic point of view, the emphasis of ‘applicability’ is particularly relevant to discourse analysis because, without theory, the analysis of discourse would be ad hoc, inconsistent and ineffective (Halliday, 2006, p.19) , and by the same token, without the analysis of discourse, there would be no *raison d’être* of SFL since scholars working within SFL often use discourse as their starting point (Mahboob & Knight, 2010, p. 1). Given this strong orientation to social accountability and discourse analysis, discourse studies featuring SFL as their framework of analysis have gained increasing momentum in the past decades (Gee & Handford, 2012; Hyland, 2013; Hyland & Paltridge, 2011; see also Fung and Low, in press for a recent discussion). A theory like this thus enables us to interpret and make sense of meaning in discourse, or more specifically, ‘what people say and write and listen to and read’ (Halliday, 1994, p. xxii).

3.2.4 SFL and health communication

In a formal sense, health communication is defined as 'any type of human communication whose content is concerned with health' (Rogers, 1999, p. 15; see Thompson, Parrott and Nussbaum, 2011 and Thompson *et al.*, 2003 for a recent review). An emerging theme in much of this research is the central role of linguistic theories in how physicians generate and exchange health information in various settings for health communication. In my foray of literature, health communication featuring SFL is still an emerging field. The past decades have witnessed a development of interest on two main fronts: (1) clinical linguistics and (2) healthcare discourse analysis.

One strand of development in health communication is clinical linguistics in which it focuses particularly on communication disorders such as aphasia (Armstrong, 2005a, 2005b; Armstrong *et al.*, 2011); Alzheimer's disease (Asp & de Villiers, 2010) and Autism (Fine *et al.*, 1994). *Contra* traditional approaches, studies informed by SFL theory aim to explicate clinical disorders in a discourse level, reflecting and locating the individual's language impairments at various linguistic strata, including lexicogrammar (i.e. CLAUSE COMPLEX: Armstrong, 1992, 2002; TRANSITIVITY: Keegan, 2012, Spencer *et al.*, 2005, 2009); semantics (i.e. EXCHANGE STRUCTURE: Ferguson, 1992, Mortensen, 2005 and THEMATIC PROGRESS: Keegan, 2012) and GENERIC STRUCTURE POTENTIAL (i.e. Mortensen, 2005; Kilov *et al.*, 2008). The functional analysis on multiple strata thus enables clinical linguists to explore not only the communicative strengths and weaknesses of communication-impaired individuals, but also illustrate how their language abilities interact with context.

Another front of investigation is healthcare discourse analysis, focusing on the interaction

at specific institutional healthcare domains. Lack of space precludes a detailed survey; the following discussion reports on two large-scale projects featuring SFL as discourse analytical framework.

3.2.4.1 Systemic Safety: the meanings of behaviour in contexts of surgical care 2003 – 2005

Led by David Butt and his team, this Australian based collaborative project aims to investigate the intrinsic relations between medical safety and interacting systems of communication in the context of operative care. Viewing surgical practice as a systemic meaning-bearing system, Butt and his colleagues explore how medical safety in operative context is manifested as ensemble effects of choices, and more precisely, how such selections could contribute to a predisposition or inhabitation of adverse outcomes. For example, Lukin *et al.*, (2011) and a more recent one Butt (2015) demonstrate how risk management is achieved among specialists and senior trainees through calibrating Butt's TENOR network (2003) with Hasan's network for COMMANDS (2009c [1992]) and lexicogrammatical systems. In a similar vein, Moore *et al.*, (2010) and Moore (2011) focus on the interaction between surgical practice and 'bodily semiosis of engagement', illustrating how the selections of distance and orientation in body alignment enact interpersonal engagement among surgeons in operating context. The research findings offered by Butt and his colleagues not only make the adverse events more explicit, but also contribute to an understanding of the way in which surgical interactions integrate with language as well as other semiotic modes (see Butt, Moore and Cartmill, 2016 for a recent report).

3.2.4.2 Emergency Communication: Improving the Quality and Safety of Patient Care through Effective Communication 2011 – 2013

Led by Professor Diana Slade and Professor Christian M.I.M.M, this Hong Kong-based, interdisciplinary research collaboration, *contra* Butt, focuses on effective communication of a local emergency department. With the continuous academic momentum, the team has successfully explored the ‘potential risk points’ (PRPs) in ED context from various perspectives (Slade *et al.*, 2015: 81). One front of investigation is Slade’s ethnographic studies of Matthiessen’s (2013) ‘semiotic risk’, which has shed illuminating light on communicative risks falling under the scope of ‘crucial role of communication’, ‘clinician’s perception on communicative challenges’ and ‘clinician handover’ etc (Chandler *et al.*, 2015; Pun *et al.*, 2015; Pun *et al.*, 2016; Pun *et al.*, 2017; Slade *et al.*, 2016).

The discussion of Section 3.2, though a bit brief and sketchy, is sufficient to point out one fact: *Halliday’s Systemic Functional Linguistic (SFL) is a general theory of language, in which its emphasis on ‘social-semiotics’ and ‘social accountability’ are particularly ‘applicable’ in doing health communication research, enabling discourse analysts to appreciate how and why language works in various healthcare domains.* Given its significance, the following sections turn to a discussion of the ‘architecture’ of SFL, in terms of a) the ordered typology of systems (Section 3.3) and b) semiotics dimensions (Section 3.4).

3.3 Locating language at the ordered typology of systems

The idea of the ordered typology of systems can be traced back to Halliday’s conception of human experience (Halliday, 2013). For Halliday, human beings inhabit both a ‘world of

matter’ and a ‘world of meaning’. Human experience in this world is thus consisted of two incommensurable realms, namely ‘realm of matter’ and ‘realm of meaning’. These two phenomenal realms are not separated, but are of constantly interplay and constant tension as human history unfolds Halliday (2013 [2005], p. 193 and 197) . To further capture the complexity between these two phenomenal realms, Halliday proposes the notion of ordered typology of systems – a ‘meta’ interpretation of the human history in the past five hundred years (Halliday and Matthiessen, 2006, p. 507; see also Matthiessen, 2015, Matthiessen and Halliday, 2009).

In the typology, phenomenal realms are constituted by four orders of systems, physical systems (1st order), biological systems (2nd order), social systems (3rd order) and semiotic systems (4th order) – the first two systems are grouped as ‘material systems’ whereas the latter two are ‘immaterial systems’. Each system stands in a hierarchic relation with increasing complexity, so that each higher-order system inherits the properties of the lower-order ones. Figure 3.1 illustrates the liner taxonomy of systems.

Material systems, as the name suggests, concern the ‘realm of matter’, more precisely, the ‘organic and inorganic matter’ extending in both spatial and temporal dimensions (Matthiessen *et al.*, 2010, p.95) .

Physical systems are the first-order systems. As emerged from the physical phenomena in our living world, physical systems are the systems which are subject to the very physical-chemical properties that exist in a habitat. In other words, they are the systems concerning only ‘physical properties’ (Matthiessen *et al.*, 2010, p. 153).

Biological systems are the second-order systems. As the second-order systems, they are physical systems with the added property of 'life' (i.e. [=physical + life]). In view of it, rather than focusing only on the physical properties, biological systems concern 'individuation', with a particular focus on the self-replicating biological organisms which evolve through the natural selection in ecosystems (Matthiessen *et al.*, 2010, p. 153).

The latter two systems, by contrast, are coined as 'immaterial systems' for they concentrate on the 'realm of meaning', or more specifically, the abstract phenomena which is 'manifested as the patterns of matter' (Matthiessen and Halliday, 2009, p. 13).

Social systems are the third-order systems. Being the third-order systems, they are biological systems with the added property of 'social order' (i.e. [=biological + value]). Like biological systems, social systems concern individuation. However, what is unique in social systems is that individuals are conceptualised socially as 'persons', with defined social hierarchy, roles systems and division of labour in social contexts. These socially-defined individuals aggregate to form social groups, which in turn aggregate to form different social institutions and ultimately society. In other words, social systems are the systems concerning the social values and the social behaviours enacted by these social individuals in society ecosystems (Matthiessen *et al.*, 2010 p. 153, cf. cline of individuation).

Semiotic systems are the fourth-ordered systems. Being the highest ordered systems, they are regarded as the social systems with the added property of 'meaning' (i.e.

[=social + meaning]). Like biological systems and social systems, semiotic systems concern individuation. However, what is important in semiotic systems is that individuals are conceptualised semiotically as ‘meaners’ – they are not only biological organisms in ecosystem or social subjects in society; but essentially meaners in speech fellowship. These ‘semiotic individuals’ make meanings through various semiotic systems including language, facial expression, gestures etc. ecosystems (Matthiessen *et al.*, 2010, p. 117; 153). Viewed from this perspective, semiotic systems are the systems concerning the meaning potential in these meaning systems.

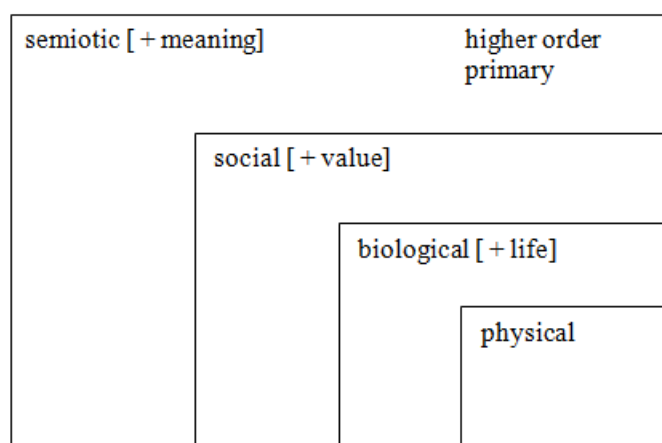


Figure 3.1 The ordered typology of systems (Matthiessen, 2001, p. 50)

From a systemic point of view, this ordered typology of systems is particularly relevant to the study of what language is and how language works because language system *per se* is one of the most complex systems in our universe (Halliday, 2013 [2005], p. 200). The ordered typology of systems thus enables us to capture the intrinsic nature of language system as well as illustrate how the system of language is related to other systems. As explicated by Halliday (2013 [2005], p. 200), language is of fourth order of complexity – it is not only a semiotic system, but also a social system, a biological system and a physical

system. The features of language in each system are summarised as below:

Language as a physical system: language is a physical construct manifested in the form of sounds wave travelling through air (i.e. acoustic phonetics).

Language as a biological system: language is a biological construct in the sense that it is produced by the movement of articulators or speech organs, which is then perceived by the sensory organs, and is in turn integrated and processed in human brains (i.e. auditory phonetics).

Language as social system: language is a social construct so that it is always maintained by social individuals; each of which takes up different social roles in society (i.e. sociolinguistics).

Language as a social semiotic system: language is a socio-semiotic construct in the sense that it is always exchanged by semiotic individuals, each of which takes up different institutional roles in society. Halliday (2003a, p.2) further categorises language in two orders: protolanguage and post-infancy human language – the former refers to the language which is of primary semiotic system whereas the latter denotes the language which is of higher-order semiotic system.

For Halliday, it is only the post-infancy human language which entails the ‘semogenic power’, enabling semiotic meaners to make meaning in society. The meanings created are thus a ‘socially constructed, biologically activated and exchanged through physical channels’ (Halliday, 2003a, p. 2).

3.4 Language as a higher-order semiotic system: a view of semiotic dimensions

As noted in Section 3.3, the conception of language in SFL is a ‘complex adaptive system’ in the sense that language is viewed holistically as a manifestation of semiotic system, social system, biological system and physical system (Matthiessen, 2015, p. 187). In terms of semiotic systems, language in SFL is a ‘leading edge of meaning’, with a strong semogenic power which other semiotic systems do not share (Halliday, 2013 [2005] p. 211). To further illustrate the semogenic power of language, this section turns to a discussion of the ‘architecture of language’, or more specifically, the semiotic dimensions that help define language in SFL theory (Halliday & Matthiessen, 2014, p. 54),

In SFL, all languages can be interpreted along ‘a set of interlocking semiotic dimensions’ (Matthiessen, 2007, p. 506), constituting a comprehensive ‘multidimensional semiotic space of language in context’ (Caffarel *et al.*, 2004, p. 18). Speaking about the major semiotic dimensions of languages, Halliday and Matthiessen (2014, p. 31) argue a basic distinction between global dimensions and local dimensions – the former ‘determine the overall organisation of language in context’ whereas the latter ‘characterise the internal organisation’ of systems. Global dimensions include *stratification*, *realisation*, *cline of instantiation*, and *metafunction*, while local dimensions consist of *rank scale*, *axis* and *delicacy* (Caffarel *et al.*, 2004b; Halliday and Matthiessen, 2014; Hasan, 2010; Hasan *et al.*, 2005; Hasan *et al.*, 2007; Matthiessen, 2007; Matthiessen *et al.*, 2010).

3.4.1 Stratification

In the course of ontogenesis, language is gradually stratified into a quarto-stratal system where both the content and expression planes are internally stratified, thereby being

transformed from a sign-system to a full-fledged post-infancy human language (Hasan, 2013, p. 275 – 279). Stratification begins when language as a sign system is stratified into protolanguage of infancy. During this ‘*primary step in stratification*’ (Hasan, 2013, p. 276), the sign system of any given language is stratified into primary semiotic system, which consists of two strata known as CONTENT PLANE and EXPRESSION PLANE (Hjelmslev, 1959). As the process of ontogenesis proceeds, the protolanguage undergoes ‘*secondary step in stratification*’, transforming from a primary semiotic system into a higher semiotic system, which is known post-infancy human language. Here, the two strata of the primary semiotic system evolve. That is, the CONTENT PLANE is elaborated into semantics (i.e. systems of meaning) and lexicogrammar (i.e. systems of wordings) whereas the EXPRESSION PLANE is expanded into phonology and phonetics (i.e. systems of sound) (Hasan, 2009f, Hasan, 2013; see also Halliday and Greaves, 2008 and Halliday and Matthiessen, 2014). Figure 3.1 illustrates the process of stratification.

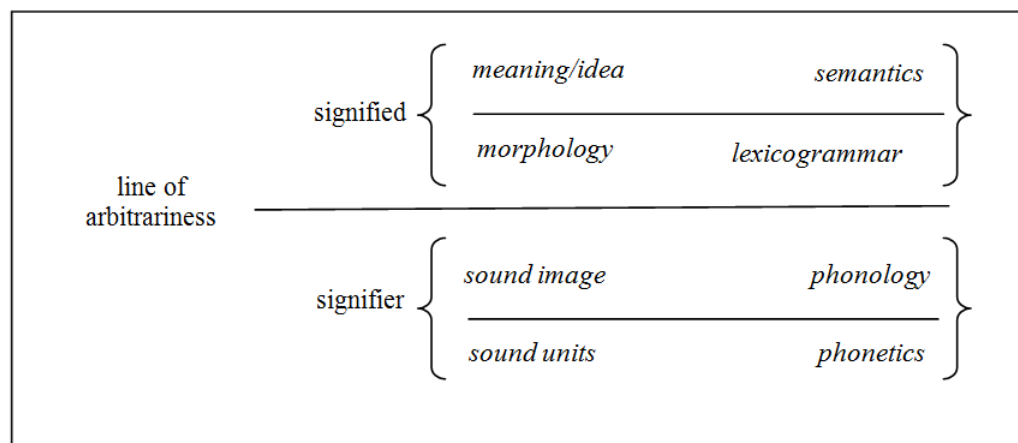


Figure 3.2 The inner stratification of language in SFL (adapted from Hasan, 2013, p. 272)

In SFL, this higher-order semiotic system does not exist independently but is embedded in an additional stratum which illustrates the extralinguistic universe *viz.*, context (Halliday &

Hasan, 1985 see also Section 3.6 for a detailed discussion on the three contextual parameters). As Hasan (2009f, p. 167) notes, the recognition of context as theoretical category is fundamental to the coherent account of every aspect of the study of language. In other words, language and context are not separated; language is essentially functioning in context. Context, the highest stratum in the hierarchy of stratification, together with the language-internal strata, forms a ‘multi-stratal semiotic’²⁴ system in adult language and this higher-order semiotic system encompasses not only linguistics meaning but also contextual meaning (Hasan, 2013, p. 276). Figure 3.3 represents the stratification of language embedded in context.

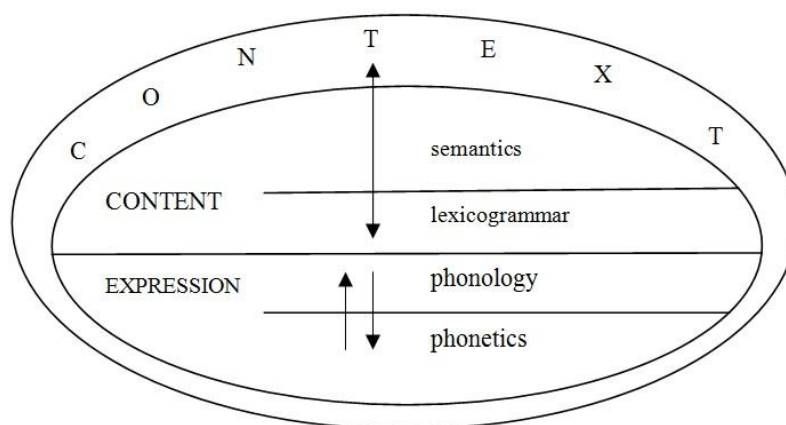


Figure 3.3 Stratification of language (Hasan 2013, p. 275)

Stratification is relevant to this study in two ways. In a practical sense, it determines which strata within the overall architecture of language are most relevant to the linguistic phenomenon that is in focus, which, in this case, is *semantics* – the point of departure of this current research. In an analytical sense, it allows us to investigate that linguistic phenomenon from a ‘trinoocular perspective’. In the present study, the most relevant stratum is semantics (i.e. the systems of meaning). The semantic stratum can thus be viewed from

²⁴ Some functional linguists would add one or two more strata (i.e. genre and ideology) above context (cf. Martin, 1992). As asserted by Hasan (2013, p. 276) there is no post-infancy human language with less than four strata.

three perspectives: ‘from above’ (i.e. the stratum above semantics i.e. context), ‘from below’ (i.e. the stratum below semantics i.e. lexicogramamr) and ‘from around’ (i.e. the semantics itself) (See Chapter 5 for a detailed disucssion).

3.4.1 Realisation

As noted in Section 3.4.1, post-infancy human language is highly stratified. If we view the stratification model of language vertically, each stratum does not exist separately but stand in a chain of realisation (see the arrows in Figure 3.3). In SFL, the realisation relation is always bidirectional i.e. a two-way relation, encompassing both an encoding view and a decoding view. As Hasan (2010, p. 277) writes:

Realisation works somewhat differently in the two directions. In the encoding view, it is an **activation** of some possible choice at the next lower level: thus *in the production of an utterance, context activates meaning, meaning activates wording*. By contrast, in the reception of the utterance, realisation is **construal** of the relevant choice at the higher level: thus *in decoding an utterance, the choice in wording construes meaning, the choice in meaning construes context* (emphasis in origin).

In this sense, language functioning in context can thus be interpreted ‘as a system of systems ordered in symbolic abstraction’ (Matthiessen, 1993, p. 226), where the higher stratum activates or is construed by the lower stratum through dialectic relations of realisation, holding across context, semantics and lexicogrammar (Hasan, 2013, p. 279). For instance, when looking from above, the contextual demands activate the semantic choices, which in turn further activate the lexicogrammatical ones, and then phonological and phonetic ones. When looking from below, the lexicogrammatical choices construe the semantic choices, and in turn further construe the contextual configuration (Hasan, 2009f).

A system of this kind, to use Lemke's word, is known as metaredundant system i.e.

CONTEXT (SEMANTICS (LEXICOGRAMMAR PHONOLOGY)))²⁵ (Halliday, 1992).

While all strata are related metaredundantly through realisations, it should be emphasised that such dialectic realisations between strata are not of 'deterministic relationship' but a matter of tendency (Bowcher, 2010, 2014; Butt and Rebekah, 2007; Halliday and Hasan, 1985; Hasan, 1995, Hasan, 2009d). For example, in Bowcher's (2014) recent account, she writes:

... a realisational-assemblage in the sense that it is a simultaneous patterning of events at different levels of abstraction, *not causal in nature but dialectic*, where features specific to each level of abstraction show a specific configuration, *re-sorted by the simultaneous and interdependent process of realisation* (emphasis mine).

As illustrated by Bowcher, features of a higher stratum are *only typically* correlated to the features of a lower one so that the realisational assemblage is not of one-to-one, deterministic relation. One typical case in point is grammatical metaphor in which the dialectic realisational assemblage between interpersonal semantic system (i.e. SPEECH FUNCTION) and the lexicogrammatical system (i.e. MOOD type) is always open-ended, entailing both congruent and incongruent realisations (see Martin, 2013 for a recent discussion).

²⁵ According to Hasan (2009f, 2010, 2013), the dialectic relation of realisation holds only within the context, semantics and lexicogrammar but not in phonology and phonetics. For Hasan (2013, p. 279 – 280), while it is valid to suggest that lexicogrammar activates phonology and in turn phonetics so that phonology and phonetics '*become the voice of lexicogrammar making the realisations physiologically accessible to listener*', Hasan argues that this is not the case in the perspective of construal. That is to say, such phonetic and phonological choices could *only relate to and signal* lexicogrammatical ones, but not *construe* them.

The recognition of realisation, or in Hasan's (2009f, p. 170) word, the 'activation-construal dialectic' is particularly relevant to this current study. In a holistic sense, this realisational assemblage enables us to study meaning cross-stratally. That is, the language in use is represented as what Hasan (2009f) describes as 'subjectively experienced as a seamless flow' across strata, and linguistic meanings – the subject of enquiry in this study – is a calibration of context, semantics and lexicogrammar, each of which rebounds with one another in metaredundant manner. In a practical sense, the dialectic realisational relation between semantics and lexicogrammar allows us to identify the formal properties of each message semantic options, or technically known as realisational statements and selection expressions respectively (see Chapter 4 Section 4.3.5. for a detailed discussion).

3.4.3 Cline of instantiation

Another global dimension that helps define the architecture of language is the cline of instantiation, which has been widely discussed in the SFL literature (Halliday, 2002, 2003b; Hasan, 2009b [1988], 2010; Matthiessen, 1993; 1995, Matthiessen *et al.*, 2010). SFL interprets the cline of instantiation as the relationship between potential/system and instance. As asserted by Halliday (2005b [1991], p. 66), potential and instance are the same phenomenon; they are the same thing viewed by observers from different standpoints²⁶. For Halliday, potential and instance are interpreted as the two poles of a cline, indicating the overall potential and a particular instance respectively. In the mid-way of the cline, there are intermediate patterns, which can be viewed from either end. Viewed from the potential pole, the intermediate region located in the mid-way of the cline is termed as sub-potential.

²⁶ In Halliday's writing, one classic analogy of instantiation is the relation between climate and weather. For Halliday, climate is the accumulation of the long-term weather patterns – or more technically, 'the theory of the weather' in Halliday and Matthiessen's (2014, p. 28) term. What differs between climate and weather, according to Halliday (2005c [1992], p. 82), is that observers view from different time depth: a climatologist is a potential-observer in the sense that he views the total climatic potential of a given geographical area, whereas a weatherman is an instance-observer who focuses on the day-to-day weather patterns.

By the same token, when viewed from the instance pole, the intermediate patterns located in the mid-way of the cline are characterized as instance type (Halliday and Hasan, 1985; Halliday and Matthiessen, 2014; Matthiessen, 1993, 1995; Matthiessen *et al.*, 2010). Crosscutting with stratification, the cline of instantiation operates in both language-external and language-internal levels:

Context at the system pole is known as context of culture, denoting ‘the environment for the total set of contextual options’ (Halliday, 1973, p. 49). That is to say, it is the potential of what all possible ways of meaning in a given culture. Context at the instance pole, by contrast, refers to ‘the environment of any particular selection that is made from within them’ (Halliday, 1973, p. 49). In other words, it is the ‘immediate environment’ where a text is functioning (Halliday & Hasan, 1985, p. 52). If we view from the system pole, the intermediate region is termed as cultural domain or institution. By the same token, if we view from the instance pole, the intermediate region is termed as situation type.

Likewise, language extends along the cline of instantiation, forming two poles at each end: *language as system* and *language as instance*. Language at the system pole is the ‘theoretical entity’ (Halliday & Matthiessen, 2014, p. 28) underlying the potential of meaning-making resources, which are in turn represented in the form system networks. Language at the instance pole, by contrast, has its own ‘separate existence’ – it is the instantiation of the language as potential in the form of **text** (Halliday & Matthiessen, 2014, p. 27). When viewed from the potential pole and moving along the cline of instantiation towards the instance pole in the stratum of semantics, the sub-potential is interpreted as register, a functional variety of

language in relation to the variation of situation type. By contrast, when viewed from the instance pole and moving along the cline of instantiation towards the potential pole, the instance type is interpreted as text type.

Figure 3.4 summarises the instantiational relations in the level of context and language.

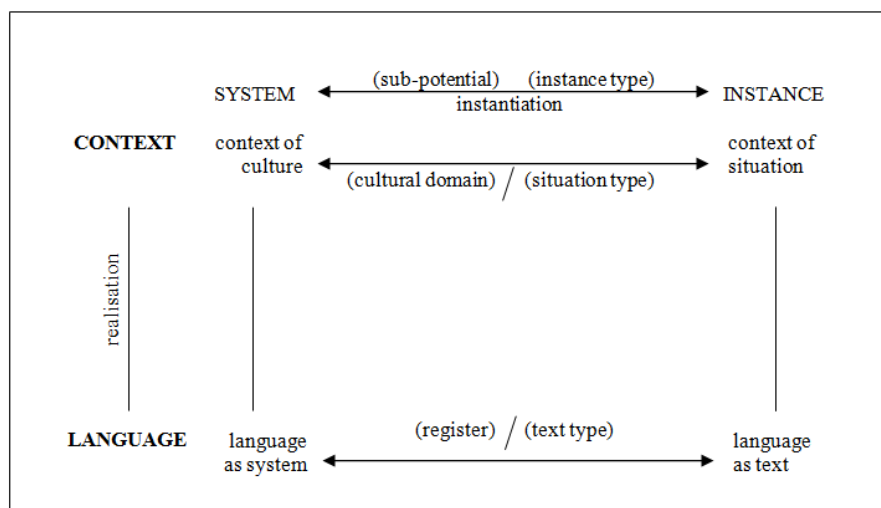


Figure 3.4 Instantiational relations in context and language (adapted from Halliday, 2007 [1991], p. 275)

Important in this cline of instantiation is that it enables us to ‘shunt’, or more specifically, to take various vantage points along the cline instead of ‘being limited to a single vantage point as an observer’ (Matthiessen, 2013, p. 444). In so doing, one could constantly shift the perspective of the system to the sub-potential and to the instance or vice-versa. The multiplicity of perspectives thus leaves various points of departure in undertaking discourse analytical tasks (see Chapter 5 for a detailed discussion).

3.4.4 Metafunctions

As mentioned in 3.2.1, post-infancy human language is a higher-order semiotic system. Important in it is that the functions of language will be of ‘a higher order of abstraction’ –

the functions which are not confined to ‘any particular spatio-temporally located use’ but are essentially performing the functions of language which are present in every meaning exchange (Hasan, 2009l, p. 81). In SFL, such language functions²⁷ are technically known as metafunctions. SFL argues that in every post-infancy human language, there exists three metafunctions, namely ideational metafunction, interpersonal metafunction and textual metafunction (e.g. Halliday and Hasan, 1985; Halliday and Matthiessen, 2014; Matthiessen *et al.*, 2010). In Hasan’s (2009m, p. 19) recount, she summarises the three metafunctions as follows:

- (i) IDEATIONAL whereby each language is a resource for construing its speakers’ experiences of the world: the meanings and wordings pertaining to this metafunction are critical for construing the nature of the FIELD OF DISCOURSE; its realisation in language takes the form of systems e.g., those of TRANSITIVITY, of TENSE, signification/reference as described in lexis as delicate grammar (Halliday & Hasan, 1985; Hasan, 1996a; Tucker, 1998), systems of EXPANSION and PROJECTION (Halliday & Matthiessen, 2004);
- (ii) INTERPERSONAL which provides resources for creating, maintaining and changing human relations: it is primarily relevant to the complex construal of TENOR OF DISCOURSE, and its realisation at the lexicogrammatical level takes the form of such systems as those of MOOD, MODALITY, MODULATION (Halliday, 1994), and so on; and finally
- (iii) TEXTUAL which consists in the linguistic resources that enable the weaving of the relevant meanings into an intelligible coherent discourse, while construing information about the MODE OF DISCOURSE such as COHESION, INFORMATION FOCUS (Halliday, 1994).

²⁷ While the term ‘*function*’ here refers to the functions of language, or more precisely, metafunctions, it should be emphasised that in SFL literature, ‘*function*’ is also used in two other senses, referring to (i) formal function and (ii) the discursive function (See Hasan, 2009l [1990], p. 81 for details)

These metafunctions, as Hasan notes, are of equal weight and status so that every utterance would manifest the three metafunctions simultaneously and none can be ‘sensically manifested except in union with the others’ (Hasan, 2009[1990], p. 82).

Central to these three metafunctions is the context – language correlation. Halliday argues that the context of situation and the text stand in a realisational relation; and it is this very relation that enables us to make appropriate predictions (Halliday & Hasan, 1985). These predictions, in Halliday’s view, are probabilistic. To highlight the predictability between context of situation and language and its probabilistic nature, systemic linguists term it as ‘context-metafunction resonance hypothesis’ (CMR)²⁸ (Hasan, 2014b, p. 8).

According to the CMR hypothesis, there is strong tendency for the tripartite contextual dimensions resonate with the three metafunctions in language, so that the FIELD OF DISCOURSE *typically* resonates with the ideational metafunction, the TENOR OF DISCOURSE *typically* resonates with the interpersonal metafunction and the MODE OF DISCOURSE *typically* resonates with the textual metafunction. With the CMR hypothesis, one could predict the functions and meanings of a text based on the specification of FIELD OF DISCOURSE, TENOR OF DISCOURSE and MODE OF DISCOURSE. Each specific contextual parameter activates a specific cluster of semantic choices, and, in turn, activates a specific cluster of lexicogrammatical choices. By the same token, one could predict the context of situation based on the activated selections of semantics and lexicogrammar since each cluster of lexicogrammatical systems would construe a specific cluster of meanings, which in turn construes values within the contextual parameters. Such metafunctional resonances

²⁸ It should be emphasised that it was once characterized as ‘context-metafunction hook-up hypotheses’ in SFL literature (see Hasan, 1995, p. 222). However, the term ‘hook up’, to Hasan, is perceived as a mistaken analogy, as stated in her recent writings. Following Hasan, I adopt term ‘context-metafunction resonance’ to refer to the correlations between contextual parameters and metafunctions.

between context, meaning and wording are represented in Table 3.1.

Table 3.1 Metafunctional resonance (adapt from Hasan 2009a [1993], p. 368)

METAFUNCTION	CONTEXTUAL VARIABLE	MEANING SYSTEM	WORDING SYSTEM	WORDING STRUCTURE
interpersonal	social relation (= <i>tenor</i>)	role exchange; assessment of probability, obligation	mood system (e.g., declarative v. interrogative ...); system of modality, modulation	prosodic
experiential	social action (= <i>field</i>)	states of affairs classification of phenomena	transitivity system (e.g., material v. verbal...) lexical systems	segmental
logical		relations of states of affairs relations of phenomenon	expression, projection systems, modification...	iterative
textual	verbal action and contact (= <i>mode</i>)	point of departure; news focus points of identity, similarity	thematic, information systems, cohesive connection	periodic

It should be added immediately that the prediction guided by the CMR hypothesis does not indicate an absolute, one-to-one hook up; rather it denotes the ‘typical realisational tendencies’ between contextual parameters and metafunctions (Hasan, 1995, p. 223). These probabilistic relationships in CMR hypothesis thus yield one more important implication – contextual parameters are ‘permeable’ (Hasan, 1995, p. 223). As asserted by Hasan, the three contextual parameters are not three separated entities remaining compartmentalized; rather they are penetrating each other. Under this premise, the conceptualisation of the FIELD OF DISCOURSE, TENOR OF DISCOURSE and MODE OF DISCOURSE in the CMR hypothesis should neither be conceptualised simply as a meaning addition nor meaning combination but essentially a configuration of context so that ‘each factor affects the meanings of the others’ (Hasan, 1995, p. 231). Such a configuration, in Hasan’s word, is known as the contextual configuration (CC) (Hasan, 1985, 1995, 1999; Hasan, 2009f; Hasan, 2014b and many others, see also Section for further elaboration).

With the CMR hypothesis, the entire multi-stratal semiotic system in post-infancy human language is of metafunctional diversification; with each descriptive stratum ‘functionally diversified’ and related together functionally through realisation (Matthiessen, 1993, p. 228). In this way, to say a post-infancy human language is metafunctional is to say that contextual parameters, clusters of meaning system and clusters of lexicogrammatical system resonate together, so that each specific contextual parameter will be realisationally related to a specific cluster of meanings systems and in turn realisationally related to a specific cluster of lexicogrammatical systems.

The recognitions of the three metafunctions and the CMR hypothesis are crucial to this study. In a theoretical sense, the CMR hypothesis serves as a reliable guidance in accounting for the formal linguistic features which *typically* correlates with the three contextual parameters. Identified patterns of semantics and lexicogrammar thus contribute to the exploration of registerial identity of ‘patient journey’, one of the central objects of enquiry of this current study (see Chapter 5 for a detailed discussion). In a practical sense, the stratal descriptions under CMR hypothesis, or in Matthiessen’s (1993, p. 276) word, a ‘metafunctional slice’ keeps the descriptive task at stake manageable, so that the description could serve as an efficient way in getting a sense of the overall stratal profile of doctor-patient interaction.

3.4.5 Rank

Rank scale (*a.k.a.* unit scale) is a hierarchy of units where each unit is known as a rank. In SFL, each rank is organised in the relation of constituency – each higher rank is composed of the unit of the lower rank (Caffarel *et al.*, 2004; Halliday and Matthiessen, 2004, 2014;

Hasan, 2013; 2014b; Matthiessen *et al.*, 2010).

At the lexicogrammatical level, SFL generally proposes up to four ranks for languages, as in *clause – group/phrase*²⁹ – *word– morpheme* (Caffarel *et al.*, 2004), so that a clause is unit consisting of groups/phrases, and a group/phrase consists of words and a word consists of morpheme. Clause is the basic unit of lexicogrammar for it is the unit by reference to other all units; it is the highest unit in the rank scale.

At the semantic level, the basic unit of semantics is text, the language functioning in context (Halliday & Hasan, 1976, p. 2). It is the highest semantic unit in the rank scale, which is regarded as the global semantic unit (Halliday & Matthiessen, 2014, p. 664). Like clause in lexicogrammatical stratum, text is composed of a number of smaller units. Various intermediate units, or local semantic units in Halliday and Matthiessen's (2014, p. 664) term, have been proposed. By far, there are two approaches in modelling the depth of a text in SFL.

Halliday's 'metafunctional -internal' approach

One approach is by proposed by Halliday (2005a [1995], p. 255), who argues that one cannot model the whole semantic system but could only 'specify the internal organisation' metafunctionally. In this view, the basic unit of semantics is a multifunctional construct, with one semantic unit for one metafunction. Thus, the rank scale of semantics, moving from the largest to the smallest, is *text – subtext – semantic paragraph – sequence – figure/move/message*, in which *figure* is the basic

²⁹ It should be note that the 'division of grammatical labour' (Halliday and Matthiessen, 2013: 9) varies across languages. For example, unlike English, the lowest rank with implications for clausal grammar in Chinese is group (Halliday and McDonald, 2004, p. 311).

unit for ideational metafunction, *move* for interpersonal metafunction, and *message* for textual metafunction (Halliday and Matthiessen, 2014).

Hasan's 'metafunctional-external' approach

Another notable approach is proposed by Hasan and her colleagues, who conceptualise semantics as a four-unit rank scale, moving from the largest to the smallest: *text – rhetorical unit – message*³⁰ – *text radical*³¹ (Cloran, 1994; Hasan, 1996b, Hasan, 2009c [1992], Hasan, 2013, 2014b; Hasan *et al.*, 2007; Williams, 1995). Rather than being a specification of the internal organisation of each metafunction, Hasan's four-unit rank scale is applicable to the whole semantic system. Here, text is maintained as the highest unit in the semantic stratum, which is comprised of one or more rhetorical units, and each rhetorical unit is comprised of one or more messages. For Hasan, messages as the linguistic unit which enters the point of origin to her multifunctionally regulated semantic networks (see Chapter 4 for a detail discussion on message).

Following Hasan, this study adopts a 'metafunctional-external' approach, conceptualising semantics as a four-unit rank scale viz., *text – rhetorical unit – message – text radical*; among which *message* is the 'ultimate descriptum' which will receive further descriptions in subsequent chapters.

³⁰ It should be emphasised that while Halliday and Hasan have employed the term *message* in the semantic rank scale, they are essentially used in different senses. For Halliday, *message* refers to the basic semantic unit in textual metafunction, whereas Hasan refers it to the smallest meaningful semantic unit for the four metafunctions.

³¹ Text radicals are termed as *seme* in Hasan's recent publication (e.g. Hasan, 2013).

3.4.6 Axis, system and cline of delicacy

In addition to rank scale, axis operating within the intra-stratal organisation of language deserves to be noted. SFL recognises two axes representing the relations of systemic terms *viz.*, syntagmatic axis and paradigmatic axis. The syntagmatic axis is concerned with ‘structure’, specifying the realisations of classes and structural organisation of systemic options. By contrast, the paradigmatic axis is concerned with ‘system’ in a sense that systemic options are interpreted as interrelated options. It extends along the cline of delicacy, moving from the left (the most general) to the right (the most specific) (Caffarel *et al.*, 2004; Halliday and Matthiessen, 2004; 2014; Martin, 2013; Matthiessen, and Halliday, 2009).

Among the two axes, fundamental importance is placed on the paradigmatic axis as it is the underlying organising principle in SFL theory, enabling a form of graphical representation at any stratum, *viz.*, system³². Matthiessen (1995, p. 793) describes a system network as a ‘theoretical representation of a set of systems’, each ‘consists of (i) a statement of a *choice* between two or more terms, represented by *features*; and (ii) an *entry condition* which specifies when the choice is available’ (Matthiessen 1995, p. 793). Hasan offers an elaborated account of ‘system’ with reference to SFL’s core conception – language as ‘social semiotic’:

The possibilities of the choice of features are systematically calibrated, being **continually redefined on the basis of the choices being made** and the relations contracted with other features, i.e. they form a system. *A system is, thus, a metafunctionally regulated grouping of calibrated features, capable of specifying*

³² As Hasan (2013, p. 280 Footnote 4) notes, the terminology ‘system’ is used in different senses in SFL literature. The ‘system’ here refers to an abbreviated form of ‘system network’.

*the variant values and shapes of a specific unit through the **systemic path** of the **choices** and their realisational statements.* Thus, together with the range of choices and the principles underlying their calibration, a system functions as a device for specifying the **meaning-making resources of a unit**: the description of language is both **systemic** and **functional**; its aim is to describe **language as a meaning potential** rather than as a set of actual structures. (Hasan, 2013, p. 281, italics origin, bold mine)

The above quote, though it is a bit lengthy, is sufficient to point out that a system network is not a mere graphical representation of systemic options; it is a ‘device’ in representing the meaning-making resources of a unit in any given language. This implication serves as a solid theoretical foundation in developing Cantonese message semantics networks.

In her recent writing, Hasan has carefully spelt out the linguistic terminologies in describing system networks (see Figure 3.5). For lack of space the terminologies associated with system networks and their descriptions have been tabulated in Table 3.2.

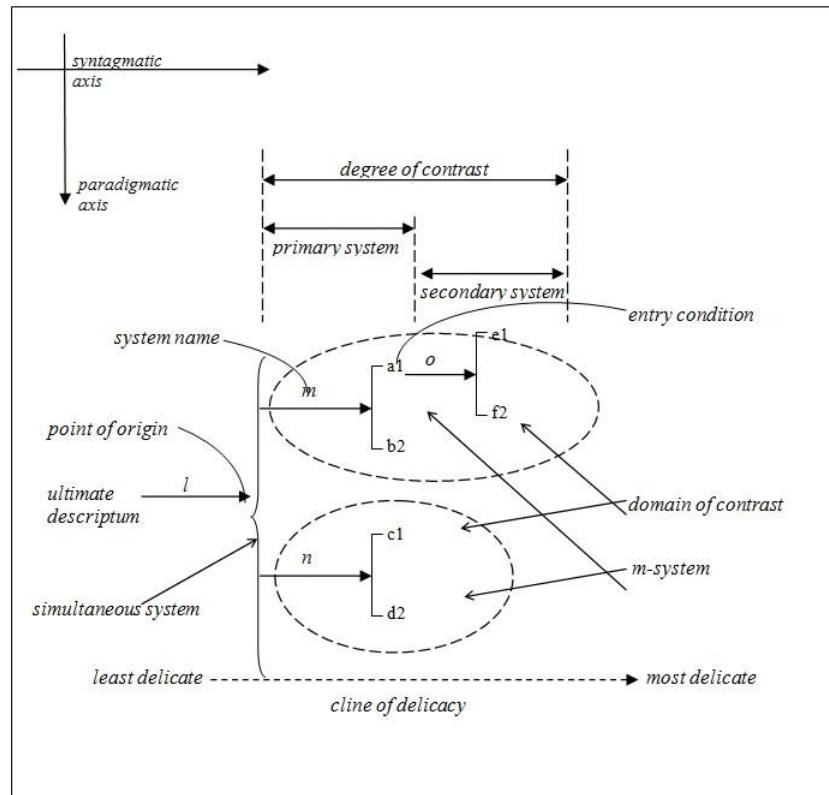


Figure 3.5 A fragment of a system network and its descriptions

Table 3.2 Descriptions of system network

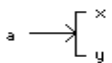
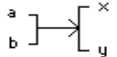
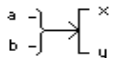
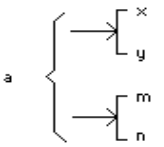
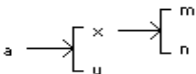
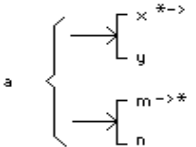
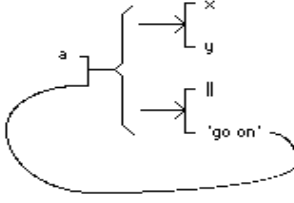
Term	Descriptions
ultimate descriptum	the object of enquiry of a system network
point of origin	the ‘initial entry condition’ of a system network so that the descriptum of focus will be described in every part of a sys-net ushered in by the point of origin (Hasan, 2014, p. 14, 17)
entry condition	the entry point of a system network (i.e. the choice <i>a1</i> serves as the entry condition of <i>system o</i> , selecting either <i>c1</i> or <i>d2</i>)
primary system	the initial system of a system network entailing the lowest degree of delicacy e.g. <i>system m</i> and <i>system n</i>
secondary system	the system (i.e. <i>system o</i>) that depends on the primary system, providing more distinctive details about the unit under description (Hasan, 2013, p. 285)

simultaneous system	the system (i.e. <i>system l</i>) in which all the member-systems share the same entry condition; diagrammatically represented by a left-facing open brace
simple system	an ‘individual system’ displaying choices (i.e. <i>system m</i> displays a selection of <i>a1</i> or <i>b2</i>) (Hasan, 2014, p. 15); diagrammatically represented by a right-facing square bracket
member-system	<i>system m</i> and <i>system n</i> are both ‘member systems’ of the simultaneous system i.e. <i>system l</i> (Hasan, 2014, p. 15)
domain of contrast	cluster of systems within each networks that are identified vertically (Butt, 2004: p, 10)
option	the as-yet-unexplored term in a system; potentially ‘choose-able’ (Hasan, 2014, p. 17)
choice	the option selected for further exploration of a particular property; (Hasan, 2014, p. 17)
feature	the properties of the unit under description (Hasan, 2014, p. 17)
terminal option	the option that has reached the last choice of a systemic path and receives no further description (Hasan, 2014, p. 17)
systemic path	the set of choices related to each other (Hasan, 2013, p. 285)
selection expression	the set of choices made along the systemic path (Hasan, 2013, p. 285)

Viewed Figure 3.5 from right to left, systems are organised as an order of delicacy, exhibiting an additive of delicate contrast of features. The former system illustrating the contrast of feature is known as the ‘first-order of delicacy’, followed by the ‘second-order of delicacy’ and so (Butt, 2003, p. 10). The system choice made in each system is termed as ‘realisation statement’; and the entire selection made along this order of delicacy is known as ‘selection expression’ (see Chapter 4 for a detailed discussion).

Before leaving this discussion, it is clear that a systematic representation of system networks requires a set of notational conventions (see Matthiessen, 1995; Matthiessen and Halliday, 2009, and Martin, 2013 in particular). Space precludes a detailed discussion on the conventions. Table 3.3 summarises the seven types of notational conventions (see Matthiessen and Halliday, 2009).

Table 3.3 System network notations (adapted from Matthiessen & Halliday, 2009, p. 98)

	<p>system: if 'a', then 'x' or 'y' -- abbreviated as 'a: x / y'</p>
	<p>disjunction in entry condition: if 'a / b', then 'x / y'</p>
	<p>conjunction in entry condition: if 'a' and 'b' (abbreviated as 'a & b'), then 'x / y'</p>
	<p>simultaneity: if 'a', then simultaneously 'x / y' and 'm / n'</p>
	<p>delicacy ordering: if 'a', then 'x / y'; if 'x', then 'm / n'</p>
	<p>conditional marking: if 'x', then also 'm'</p>
	<p>recursive system (logical): if 'a', then 'x / y' and simultaneously option of entering and selecting from the same system again</p>

To sum up, Section 3.4 has surveyed the ‘semiotic landscape’ of language through the six semiotic dimensions. Within this linguistic territory, language is conceptualised as a meaning potential; and the linguistic meaning rebounding cross-stratally is represented

graphically through system networks. The descriptions and notations of system network are particularly relevant to the development of Cantonese semantic networks in that it enables us to represent and describe Cantonese meaning in a systemic fashion (see Chapter 5 for details).

3.5 Mapping ‘context’ according to systemic order

In Section 3.3, the ordered typology of systems characterises phenomenal realms into four ordered systems. These systems stand in a hierarchic relation with increasing complexity, so that each higher-order system inherits the properties of the lower-order ones: 1st-order: physical systems – 2nd-order: biological systems [=physical + life] – 3rd-order: social systems [=biological + value] – 4th-order: semiotic systems [=social + meaning] (Matthiessen, 2015a, p. 188).

Given that *context* is one of our phenomenal realms in our human experience, if we locate *context* in the ordered typology of systems, it follows that context in SFL is of four orders of complexity: physical contexts (1st order) – biological contexts (2nd order) – social contexts (3rd order) and semiotic contexts (4th order). Physical contexts and biological contexts are regarded as ‘material contexts’, concerning the realm of matter, whereas social contexts and semiotic contexts are known as ‘immaterial contexts’, with a particular focus on the realm meaning. Figure 3.6 presents the typology of context according to system orders. To further demonstrate the distinctive features of these contexts, the following discussion will particularly focus on emergency departments in hospitals.

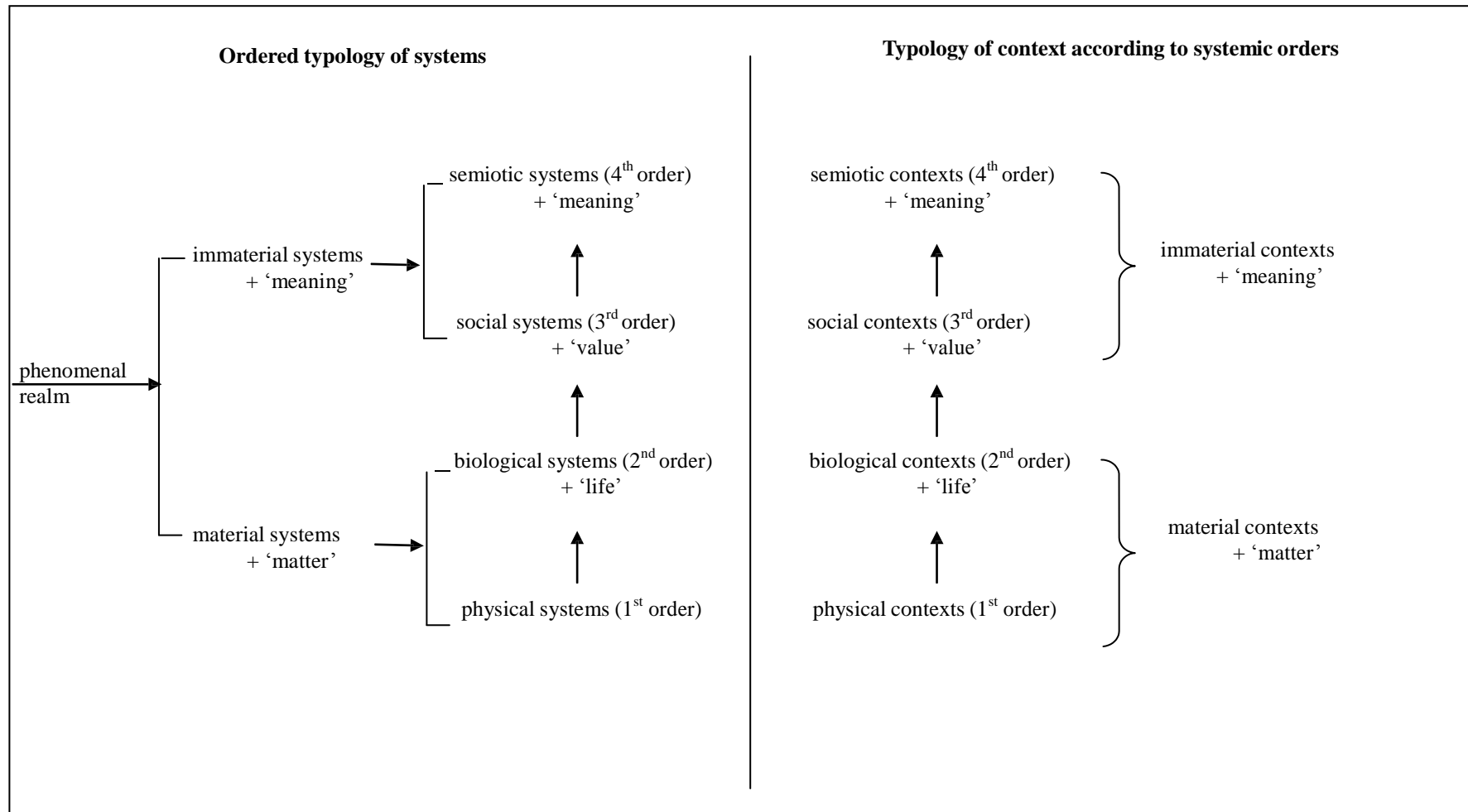


Figure 3.6 Typology of context according to system orders (Matthiessen, personal communication)

3.5.1 Material contexts

Material contexts, as the name suggests, concern the ‘world of matter’. There are two subtypes of material contexts, namely physical contexts³³ and biological contexts (cf. material situational settings in Hasan, 1999).

Physical contexts are the first-order contexts, concerning the physical settings where social processes take place as well as the elements identified in these settings. These identified elements are non-human entities, and are subject to the law of physics – they are essentially the physical elements that co-occur with the physical settings. In this study, the physical context of focus is hospital emergency department – a designed habitat for medical treatment. Within this designed habitat, there are many organic and inorganic objects particularly relevant to this setting, such as blood pressure monitors, stethoscopes, cardiac monitors. Figure 3.7 illustrates the physical context of the emergency department at where this study is situated.

Biological contexts are the second-order contexts: it is the physical contexts with the added property of ‘life’. In other words, biological contexts concern all the life forms in the physical contexts. The human entities identified in the hospital emergency department vary, including patients, patients’ relatives and friends, medical interpreters, medical staff, to name but a few. Viewed from this perspective, hospital emergency

³³ Perhaps, the most comparable concept of material context in SFL is Hasan’s idea of material situational setting (MMS). For Hasan, MSS is the situation surrounding the language act, consisting of element which is not part of the relevant context, such as material objects, persons and so on. Viewed in terms of degree of encapsulation, MSS is merely the ‘dormant force’ (Hasan, 2009b [1988]. P.177), enjoying the ‘potential of relevance but that potential did not get actualised’ (Hasan, 2011, p. 26, see also Cloran, 1994; Hasan, 2009; Hasan *et al.*, 2007).

department is thus analogous to the niches in ecosystem, where the human entities identified are the biological individuals in this context.

3.5.2 Immaterial context

Immaterial contexts, by contrast, refer to the context concerning the ‘world of meaning’. There are two sub-types of immaterial contexts, namely social contexts and semiotic contexts.

Social contexts are the third-order contexts: it is the biological contexts with the added property of ‘value’. In other words, social contexts concern the social order of the biological context. Hospital emergency department is a social context in the sense that it is one of the socially-defined contexts in society – it is one of the healthcare departments in a given healthcare institution i.e. hospital (Iedema, 2007b). Human entities identified in this department are not merely biological individuals, they are, in essence, social individuals, or more specifically ‘persons’, with defined institutional roles, social hierarchy and division of labour; and it is these social attributes which define their social practices.

In the case of hospital emergency department, social context is more than social; it is highly institutionalised (e.g. Bowcher, 1999; Hasan, 2011e[1981]). Institutionalisation is a social attribute concerning the degree of institutionalisation of both language system and context system. For Hasan, institutionalisation is a continuum extending from most institutionalised to least institutionalised or individuated (Hasan, 2011e [1981], p. 254). It should be emphasised that not all social contexts are institutionalised.

As argued by Bowcher (1999, p. 155 – 157), an institutionalised setting is typically coded nonverbally, and is manifested in the setting in a number of ways, including feature of time, place, dress code and visual coding orientations.

Perhaps, the most significant manifestation illustrating that hospital emergency department is an insitutaionalised social context is its dress code. As remarked by Bowcher (1999, p. 151 – 156), dress code is one significant means in demarcating individuals social backgrounds and social classes, thus enabling us to make interpretation if the persons belong to specific social group and social relation, and thus their nature of social activity and the nature of social relations. In the emergency department in which this current study is situated, it is on duty medical staff members who are required to conform to a prespecified or established dress code (i.e. blue uniform for doctors and pink uniform for nurse). The uniform they wear is not a choice in clothing, but, in essence, a manifestation of their institutional roles, social hierarchy and power. For example, while both uniformed staff members could both perform medical activities; it is only those who dress blue uniform (i.e. doctors) could perform medical consultations in this social context.

Semiotic contexts are the fourth-order contexts: it is the social contexts with the added property of ‘meaning’. In other words, semiotic contexts concern the system of meaning identified in hospital emergency departments. Human entities identified in this department are not merely social individuals, they are, essentially, semiotic individuals, or more precisely ‘meaners’, with defined semiotic roles and exchange meanings in

both verbal and non-verbal manners. The meanings exchanged are organised in the form of register; each of which is associated with a particular situation type. Examples include doctor-patient communication, doctor-doctor communication, doctor-nurse communication to name but a few. Viewed from this perspective, semiotic context is not simply an abstraction from social context, it is essentially a ‘linguistic construct’ (Hasan, 2005, p. 61)

It should be emphasised that in hospital emergency department, these ranges of registers do not exist separately but are organised as a communication network. Meanings exchanged by meaner thus extends beyond registers but are continuously transmitted and transformed, constituting a flow of information throughout the hospital emergency departments. In other words, the semiotic contexts of registers extend beyond the level of register, but to the level of hospital emergency department as a unified whole. The communication, in this sense, is more than a ‘linguistic construct’; it is essentially a ‘discursive construct’, or more precisely, a ‘complex semiotic organisation’ (Iedema, 2007; Matthiessen, 2013).

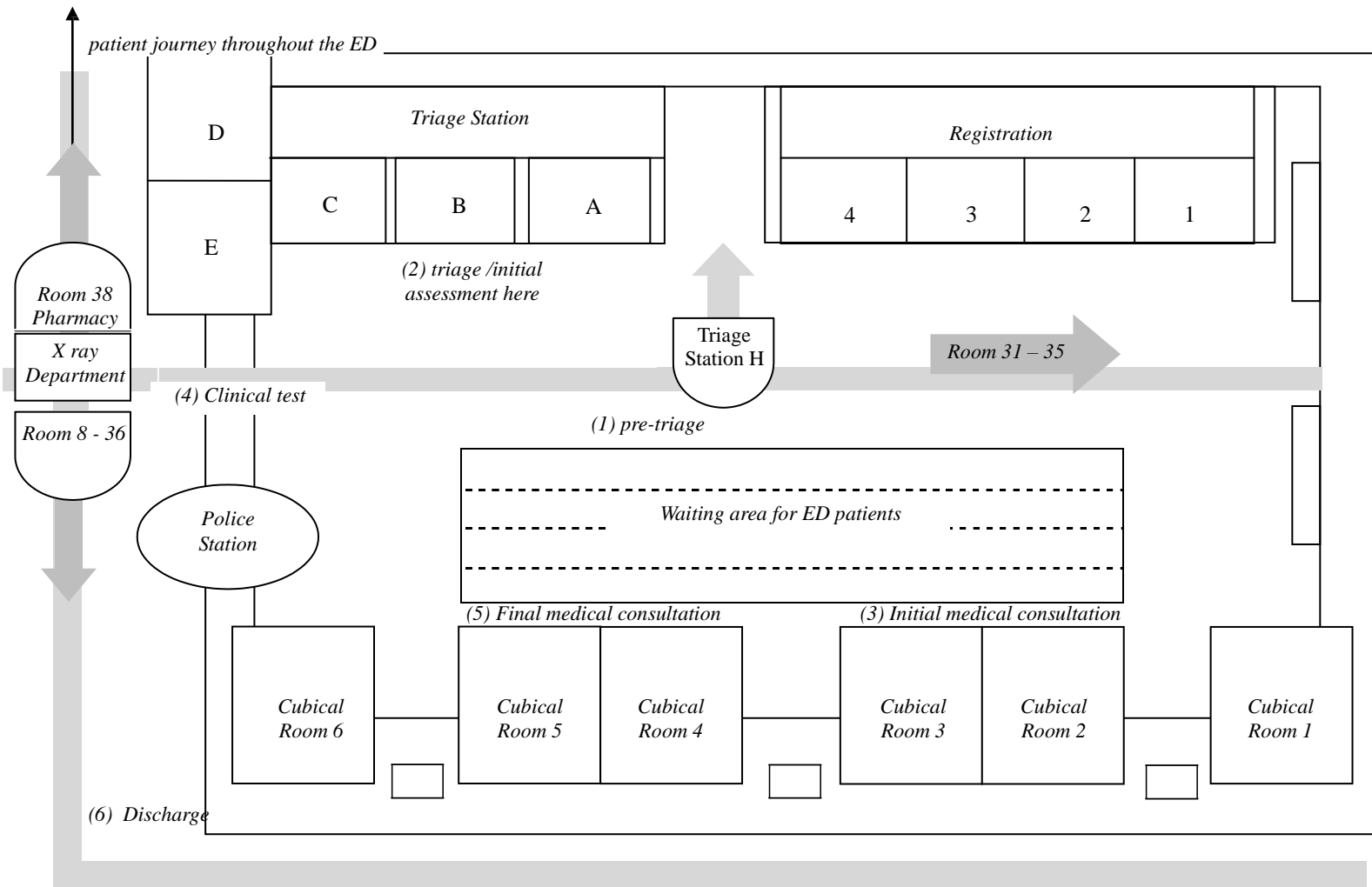


Figure 3.7 A sketch of the floor plan of emergency department (ED) in TMH

As the above discussion shows, ‘context’ in SFL is a linguistic construct, entailing physical context, biological context, social context and semiotic context. These four types of context are not separated, but are organised in hierarchy as in Figure 3.2. Semiotic context, being the highest-order of context, is perhaps the most complex one. To further illustrate its complexity, the next section will turn to a discussion on three associated concepts, *viz.*, relevant context, situation type and contextual configuration.

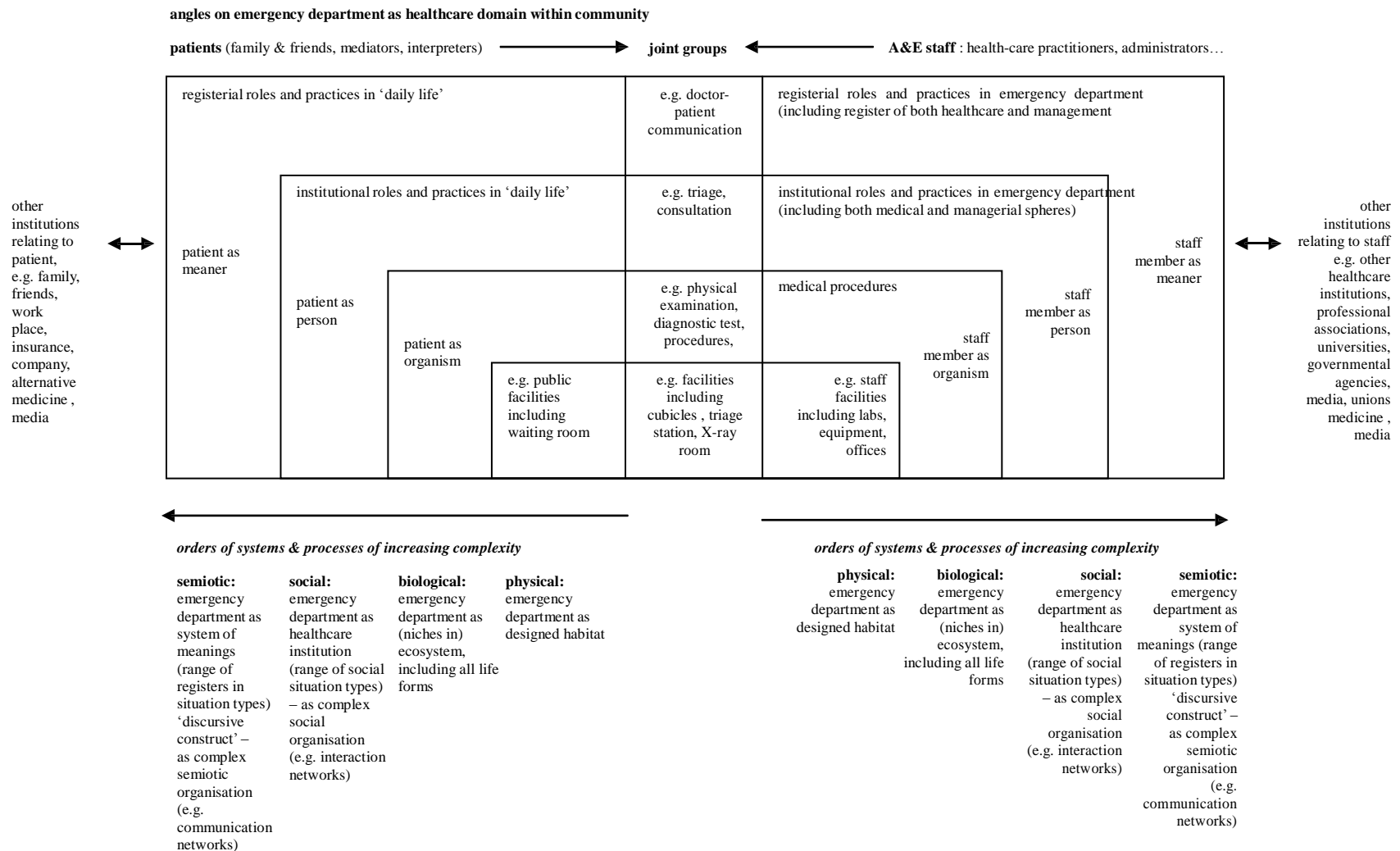


Figure 3.8 Typology of the context according to systemic orders in hospital emergency department (Modified from Matthiessen, 2010)

3.6 Semiotic context: relevant context and contextual configuration

As briefly discussed in Chapter 3.4.1, context extends between the poles of the cline of instantiation: context of culture and context of situation; the former indicates ‘the environment for the total set of these options’ (Halliday, 1973, p. 49) whereas the latter denotes the ‘the environment of any particular selection that is made from within them’ (Halliday, 1973, p. 49). Most importantly, they are of the same phenomenal realm viewed from different time depth, that is, contexts of situation are the instantiations of context of culture (Halliday, 2007; Halliday & Hasan, 1985; Halliday & Matthiessen, 2014)

While both Malinowski and Firth have foregrounded the intimate relations between text and context of situation, what distinguishes Halliday from them is that he reinterprets and clarifies the notion of context by proposing tripartite description of context — three contextual parameters to represent the aspects of situation where language is playing a role (Halliday *et al.*, 1964, p. 17). These contextual parameters are termed as FIELD OF DISCOURSE, TENOR OF DISCOURSE and MODE OF DISCOURSE respectively (Halliday and Matthiessen, 2014; Hasan, 2009m). A formal and detailed definition of these contextual parameters is given by Halliday and Hasan (1985, p. 12), which is reproduced as follow:

1. THE FIELD OF DISCOURSE refers to what is happening, to the nature of the social action that is taking place: what is it that the participants are engaged in, in which the language figures as some essential component?
2. THE TENOR OF DISCOURSE refers to who is taking part, to the nature of the participants, their statuses and roles: what kinds of role relationships obtain among the participants, including permanent and temporary relationships in which they are involved?
3. THE MODE OF DISCOURSE refers to what part the language is playing, what it is that the participants are expecting the language to do for them in that situation: the symbolic organisation of the text, including the channel (is it spoken or written or some combination

of the two?), and also the rhetorical mode, what is being achieved by the text in terms of such categories as persuasive, expository, didactic, and the like.

Halliday and Hasan (1985, p.12)

As seen from the above quote, these three contextual parameters are all modified by the post-modifier '*of discourse*', suggesting that they are 'specifically discourse related' (Hasan, 2001, p. 7). That is to say, they are not intended to cover the entire aspects of the immediate context, but only concern the aspects where language plays an active role in the discourse (Hasan, 2004, p. 21). These aspects, as maintained by Hasan (2005, p. 60), are based on the participants' interpretations of the social situation. In other words, to say that context of situation of the text in SFL is to refer only to the situation perceived by the speakers which is relevant to the text production, so that the language will always 'encapsulate' the relevant contextual features and provide the receiver information about 'who was doing (field), with whom (tenor) and how (mode)' (Hasan, 2012, p. 264). In Hasan's writing, the type of situation entailing these aspects of context of discourse is coined as 'relevant context'³⁴ (Hasan, 2009a [1993], 2009f, Hasan, 2011d, 2011e [1981]).

It should be emphasised that the three contextual parameters of relevant context are only theoretical categories, bearing the 'same abstract nature' as those in semantic and

³⁴ Another equivalent term for 'relevant context' is situation type (see Hasan, 2003 [1973], p. 241). However, the term 'relevant context' is used in Hasan's subsequent writing because of the needs to distinguish the immediate context of discourse from the material situational setting (MSS). As aforementioned, relevant context is only one of the aspects of 'immediate context of discourse' (Hasan, 2009b [1988], p. 177). For Hasan's recent conception, the immediate context of discourse is a conjunction of relevant context and MSS (see Hasan, 2010). While relevant context is the 'semiotically construed context' (Hasan, 2011c [1978], p. 257), MSS is the situation surrounding the language act, consisting of element which is not part of the relevant context, such as materials objects, persons and so on. Viewing it in terms of degree of encapsulation, MSS is merely the 'dormant force' (Hasan, 2009b [1988], p. 177), enjoying the 'potential of relevance but that potential did not get actualised' (Hasan, 2011: 26, see also Cloran, 1994; Hasan, 2009c; Hasan *et al.*, 2007).

lexicogrammatical strata³⁵. In a sense, each contextual parameter is essentially conceptualised as a ‘reservoir’ (Hasan, 2009b [1988], p. 175). That is, each parameter is instantiated by a wide range of ‘values’, or more precisely, a set of systemically related contextual features (Hasan, 2012, p. 264). In view of it, each situation type is essentially an instantiation of the contextual potential, or more precisely, a configuration of the total set of contextual values ‘selected’ in these reservoirs. Such selected contextual values, as discussed in Section 3.4.2, are known as contextual configuration. For Hasan, the recognition of contextual configuration in SFL is important because everything in discourse is ‘ beholden to the relevant contextual configuration’, including register, its structure, its texture, its principles of consistency and variation etc (Hasan, 2004, p. 25). In other words, contextual configuration is the central object of enquiry, serving as the point of departure to registerial analysis in SFL.

3.7 Register in SFL

To conduct registerial analysis, the most pressing question is *In what way register is conceptualised?* Introduced into modern linguistics by Reid (1956), the term ‘register’ has gained rapid attention in educational linguistics, descriptive linguistics and sociolinguistics in the mid 1950s (Jean Ure, 1992, p. 5). In SFL, the term ‘register’ has been conceptualised in two different senses, referring to two different functional phenomenon. As suggested in Matthiessen (2015b), the different uses of *register* in SFL literature are the result of the various theorisations of context. Hallidayan systemic functional model places much emphasis on the

³⁵ While semantic and lexicogrammatical descriptions in SFL are well-developed and represented in system networks, the contextual descriptions of the three contextual parameters, however, rely mostly on the common sense of the researchers. As argued by Hasan, such descriptions are somehow vague and in lack of ‘checkable criteria’ (Hasan, 2010, p. 179).

cline of instantiation. In his model, register, the functional variation of language, is located as the mid-region along the cline of instantiation in the semantic stratum, denoting the linguistic meanings at risk in a given situation type. *Contra* Halliday, Martin emphasises the *hierarchy of stratification*, stratifying context into *genre* and *register*³⁶. For Martin, such stratification is motivated for a number of practical needs (Andersen *et al.*, 2015 - 53). Register, in Martin's sense, refers to 'the semiotic system constituted in the contextual variables *field*, *tenor* and *mode*' (Martin, 1992, p. 501 – 502, see Martin, 2010 for a recent discussion). In other words, *register* in Martin's stratified context model serves as a rough equivalent of *situation type* in the Hallidayan systemic functional model (Matthiessen, 2015b, 2015c for a discussion on the comparison of models and the different uses of register in SFL). It should be emphasised that both approaches have been widely accepted in the SFL, each of which sheds profound insights in register/genre³⁷ studies respectively. Given that Halliday himself continues to hold his view on register, it appears important to continue to expand and develop his idea further (Lukin *et al.*, 2011, p. 189). In this study, I particularly follow Halliday's conception of register – a notion which was first proposed by him and his colleagues in 1960s when distinguishing

³⁶ While in SFL literature, the terms *genre* and *register* in Martin's model is sometimes regarded as equivalent terms of 'context of culture' and 'context of situation', it should be emphasised that such an association, in Martin's view, is not preferred. As remarked in Martin he, personally, would not call his approach to context in this way because these two terms are essentially 'not a formal part in his theory' (Martin in Andersen *et al.*, 2015, p. 50). Following Martin, the stratified view of context is termed as genre and register only.

³⁷ In a general sense, both Matthiessen's and Martin's works can be regarded as text type taxonomy. Perhaps the major distinction lies in their different conception of context. Following Halliday, Matthiessen locates his work at the level of register so that one could characterise them from context (field, tenor and mode), from semantics and from lexicogrammar. Martin, by contrast, locates his account at a stratum above the contextual stratum (i.e. genre), treating it as a separate phenomenon realising the values of field, tenor and mode, which in turn realises semantics and in turn lexicogrammar. Given this distinction, it should be emphasised that these two approaches are not mutually exclusive. Indeed, some of the genres in Martin's account has been re-conceptualised by Matthiessen from the perspective of registerial cartography (see Matthiessen, 2015a, p. 63, 65). For a detail discussion on their distinctions and similarities, see Andersen *et al.*, (2015: p. 28 - 32); Matthiessen *et al.* (2010, p. 220) Matthiessen (2015a, b).

language variation³⁸. As Halliday *et al.*, write:

A dialect is a variety of language distinguished according to user; different groups of people within the language community speak different dialects. It is possible also to recognise varieties of a language along another dimension, *distinguished according to use. Language varies as its function varies; it differs in different situations*. The name given to *a variety of language distinguished according to use* is ‘register’ (emphasis mine)

As seen from the above quote, language in SFL is ‘a form of activity of human beings in societies’. This social activity varies according to its users and uses – the former is known as dialect and the latter is referred as register (Halliday *et al.*, 1964, p. 4). In other words, register is a functional variety of language accounting for ‘what people do with their language’ (Halliday *et al.*, 1964, p. 87). Given that register is to do with languaging in a given type of situation, *register*, in Halliday’s view, is essentially a linguistic category (cf. register in Martin, 1992). Being a linguistic entity, register is ‘Janus-like’ in a sense that it faces in two directions – on the one hand, it is motivated by a specific situation type, or more precisely, the relevant context configuration where texts are functioning, and on the other hand, it semiotifies the dimensions of the social situation through its semantic features³⁹. Such a definition reinforces the fact that register is NOT defined *situationally* but *linguistically* (see Figure 3.3, see also Halliday, 1978, Hasan 2011d).

³⁸ It should be noted that in addition to dialectic variation and registerial variation, codal variation is added in subsequent studies, resulting in three types of language variation in SFL (Halliday, 1973).

³⁹ In Halliday’s early writing, he regarded that formal patterns – the crucial criteria of any given registers – are to be found in its grammar in its lexis’ (Halliday *et al.*, 1964, p. 88). This view was subsequently clarified that it is, in essence, the semantic features which serves as the crucial criteria in register identification (Halliday, 1978, p.68).

Since every text pertains to a register and each register is associated with a situation type (Matthiessen, 2015b, p. 19), so long as the configuration of the situation type remains unchanged, any text displaying the same CC will instantiate the same register, thus exhibiting a certain degree of registerial regularities. In other words, the study of a register is to study ‘the regularities between CC and their realisations, viz. texts’ (Hasan, 2014b, p. 10).

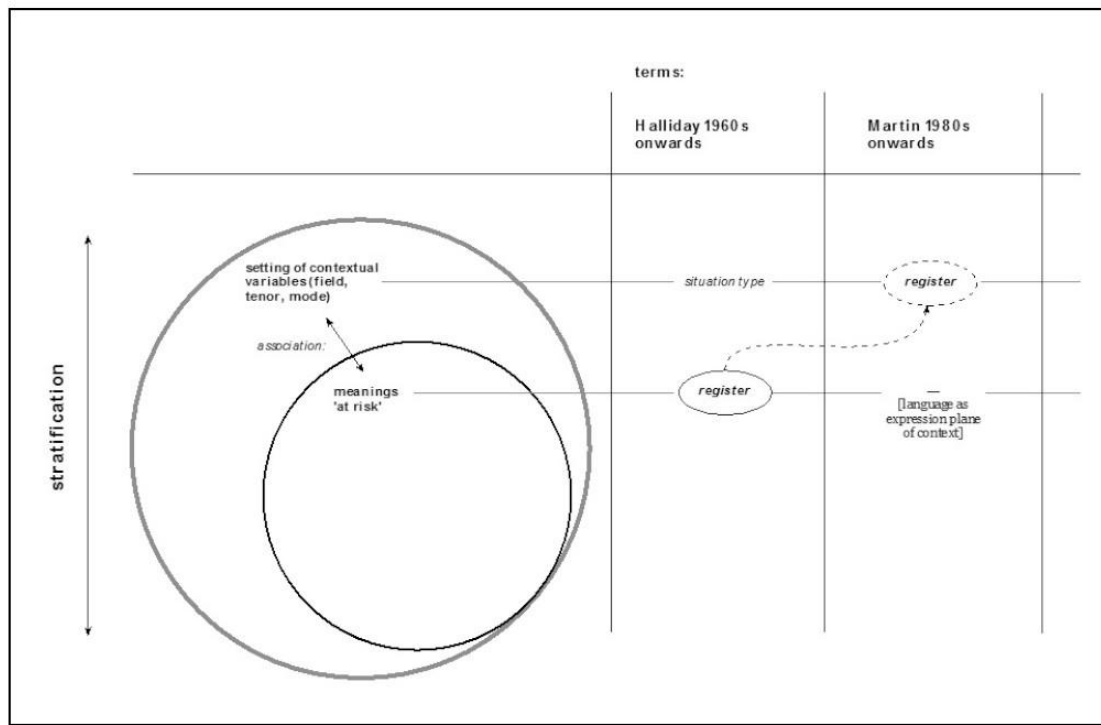


Figure 3.9 Locating register along the cline of instantiation and hierarchy of stratification in Halliday’s model of SFL (adapted from Matthiessen, 2015a, p. 22)

3.8 Patient journey as register

To illustrate how the SFL conception of ‘register’ is accommodated in emergency department, let me turn to Figure 3.4. As illustrated, the relation between emergency department and register is both ‘instantiational’ and ‘compositional’.

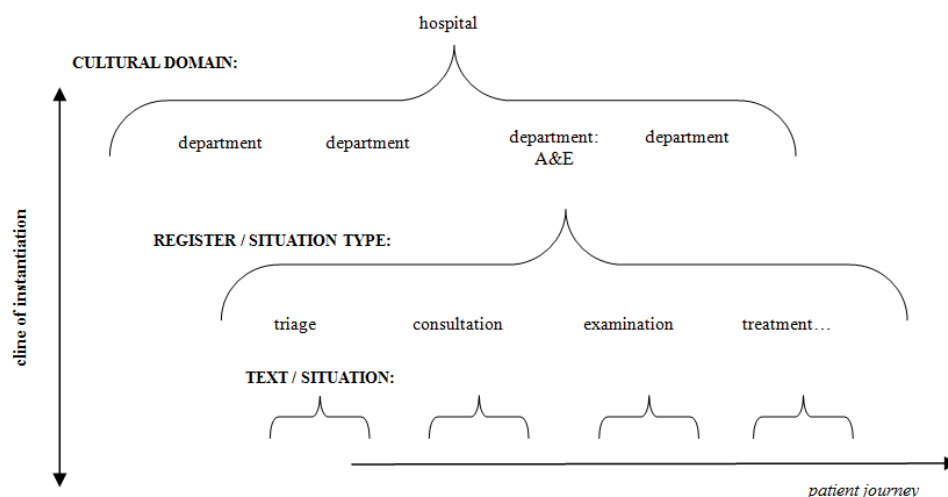


Figure 3.10 Locating ‘register’ in the healthcare domain (hospitals)

In an instantiational sense, patient journey is regarded as a functional variety of language pertaining to the specific situation types identified in emergency department. In other words, they are the generalisations from texts observed and recorded in emergency department, each of which entails a particular situation type (Matthiessen, 2013, p. 444). If we move along the cline of instantiation towards the potential pole, the aggregation of these emergency department-related registers constitutes one of the sub-cultural domains in hospital care, *viz.*, emergency department. In this sense, patient journey, which instantiates the contextual configuration of emergency department, is thus conceptualised as register.

By the same token, patient journey in emergency department is ‘compositional’. Registerially, it is conceptualised as a higher-ranking unit of the medical register, or more precisely, a macro-register (Martin and Rose, 2008), just as THEME can be interpreted as macro-theme, hyper-theme and clausal theme. Compositionally, patient journey as macro-register is comprised of a

range of sub-registers including ‘triage’, ‘consultation’, ‘examination’, ‘medical treatment’ etc (Slade *et al.*, 2008). Important in these emergency department–related registers is that they are not separated entities; they are essentially interrelated, and unfold consecutively as the patient goes through his or her medical visit.

In this study, patient journey, following Matthiessen’s (2013, p. 454) is defined as ‘sequences of situation’ where patients encounter ‘one situation after another, with changes both in socio-semiotic processes and in personal’ (Matthiessen, 2013, p. 454, cf. registerial consistency in Hasan, 1999).

3.9 Representing the contextual variables: the two approaches in Hallidayan tradition

In describing the contextual features of a register, the most pressing issue appears to be *In what ways should contextual configuration be described and represented in SFL systemically?* In my foray of literature, there are various approaches in modelling context in SFL, each of which takes different points of departure and representations. Lack of space precludes a thorough review on these different approaches; the following section will only focus on the Hallidayan tradition (cf. Martin, 1992; Poynton, 1985; Butt, 2004). The selection of Halliday’s work here is simple: his contextual analysis is always the classic description in SFL, which has been tested in a wide range of studies. Since 1970s, Halliday himself has provided a number of contextual sketches of various contexts of situation, each of which serves as a good instantiation of the general categories of the context of culture.

Recognising the continuous development of contextual and registerial descriptions within

Hallidayan camp, I particularly draw on the works proposed by Christian Matthiessen and Ruqaiya Hasan. While these two approaches are distinct in terms of their research orientations, they are, in essence, inter-related in a sense that they are both inherited from Halliday's theory of context. The views from these two approaches thus enable us to fully understand how Halliday's theorisation of context is manifested in the context of emergency communication.

3.9.1 Matthiessen's registerial cartography – a typological representation

Like other SFL scholars, Matthiessen has a long-standing interest in researching the notion of 'register', one of his important strands of investigation which can be traced back to early 1990s (see Matthiessen, 1993). Following Halliday, the central object of inquiry of register in Matthiessen's works lies in 'a detailed description of the registers of a language', a research orientation upheld by Halliday and his colleagues almost exactly half a century ago (Halliday *et al.*, 1964). To push himself further to the study of register as functional varieties of language, Matthiessen draws on Jean Ure's account of text type and proposes the notion of 'registerial cartography' – a large-scale and long term project which is designed to continue to expand Halliday's notion of register. By 'cartography', Matthiessen suggests that his approach is to develop 'comprehensive maps of registers in different language' (Matthiessen, 2014, p. 8) by 'filling in certain descriptive gaps in our account of language in context' (Matthiessen, 2015c, p. 3). Locating his cartography at the mid region of the cline of instantiation (i.e. register/text type) and along the hierarchy of stratification (i.e. within the content plane of language interfacing context and semantics), Matthiessen views register 'from above', arguing context is the vantage point in register classification because registers 'operate in situation types, and situation types are characterised as range of field, tenor and mode values'

(Matthiessen, 2006, p. 39). Given that Matthiessen's account is built on Ure's work, perhaps, what is distinctive in his work is that he and his colleagues have made four major advancements in classifying and operationalising registers. These four advancements are summarised as follows:

- (i) It should be Matthiessen's registerial cartography stay loyal to Halliday (1978)'s notion of register, characterising the context in terms of FIELD OF DISCOURSE, TENOR OF DISCOURSE and MODE OF DISCOURSE⁴⁰. More precisely, it employs Halliday's trinocular vision so that every register in question is approached from above (context), from roundabout (semantics) and from below (lexicogrammar). In other words, Matthiessen's registerial cartography is neither a duplication of Ure's work nor simply a registerial repertoire; it is essentially a 'functional' mapping of varieties of language used based on the contextual configurations that the registers are associating with, and more specifically, the examinations, descriptions and theorisation of registers are all inherited in Halliday's line of development (Matthiessen, 2014, p. 8; cf. genre model in Martin, 1992).

- (ii) Like Ure, Matthiessen starts with FIELDS OF ACTIVITY (as opposed to field of experience), arguing it is a 'more important source of generalisation' when it comes to registerial cartography (Matthiessen, 2006, p. 45). However, what is distinctive

⁴⁰ It should be emphasised that within the SFL tradition, there are indeed various alternative SFL models of context. Perhaps, the major distinction lies in the conceptualisation of 'tenor'. Whereas in Halliday's model, there is only one tenor, other alternative models tend to distinguish tenor further into two subtypes such as 'personal tenor' and 'functional tenor' in Gregory (1967), 'formality' and 'role' in Ure and Ellis (1977) and 'relationship purpose' and 'pragmatic purpose' in Fawcett (1980). See Martin (1992) for a comparison on these alternative models.

in Matthiessen's account is that he and his colleagues reconceptualise and redefine the eight primary FIELDS OF ACTIVITY identified by Ure, and more importantly, extend the delicacy in two to three steps (Matthiessen, 2014, p .8). Briefly, the eight primary types of FIELDS OF ACTIVITY in Matthiessen's account are conceptualised as follows:

- (i) expounding (general classes of phenomena),
- (ii) reporting (particular instances of phenomena, typically chronicling events),
- (iii) recreating (some aspect of experience, imaginatively),
- (iv) sharing (personal values and experiences),
- (v) doing (collaborating in, or directing, social behaviour),
- (vi) enabling (typically some course of action — some form of doing),
- (vii) recommending (some course of action or some commodity) and
- (viii) exploring (assigning public value to commodities or arguing about ideas)

In some of his writings, Matthiessen terms these eight activities as social-semiotic processes⁴¹, highlighting that the fact that the FIELD OF ACTIVITY is either primarily social (i.e. a process of interactive behaviour as in *doing*) or primarily semiotic (i.e. a process of exchanging meaning as in *expounding*, *reporting*, *recreating*, *sharing*, *enabling*, *recommending* and *exploring*) (Matthiessen, 2015b, c; Matthiessen and Kasyap, 2014; Matthiessen *et al.*, 2010)

⁴¹ Following Matthiessen, these two terms will be used interchangeably in this thesis (Matthiessen, 2015b, p.6).

(iii) Whereas Ure's taxonomy of text is represented as a typological matrix, Matthiessen's registerial cartography enables both typological and topological representations; each of which highlights different registerial dimensions (Martin and Matthiessen, 1991, p. 191). Take *FIELDS OF ACTIVITY* as an example. In the typological representation, the eight primary socio-semiotic processes are represented in system networks, foregrounding the dimensions of ordering in delicacy and simultaneity of delicacy. By the same token, in the topological representation, the eight primary socio-semiotic processes are represented as a radial diagram (see Figure 3.11), bringing out the fact that the fields of activity are essentially of 'indeterminacy', that is, the socio-semiotic processes will shade into one another in macro-registers, a phenomenon known as registerial hybridity (Matthiessen and Teruya, 2016).

(iv) While Ure's text typology classifies texts in accordance with situational factors, it appears that her account so far only concerns the intersection of values in fields of activity and mode. It appears necessary to supplement the classifications with tenor since relevant context, from the perspective of Halliday's account of SFL, is a configuration of field, tenor and mode values. In so doing, in Matthiessen's registerial cartography, tenor is added as another dimension of classification so that registers are characterised and mapped according to their relevant contextual configurations (Matthiessen, 2006, p. 39). Given this addition, Matthiessen's registerial cartography, compared with Ure's account, offers a more comprehensive and sophisticated mapping of registers.

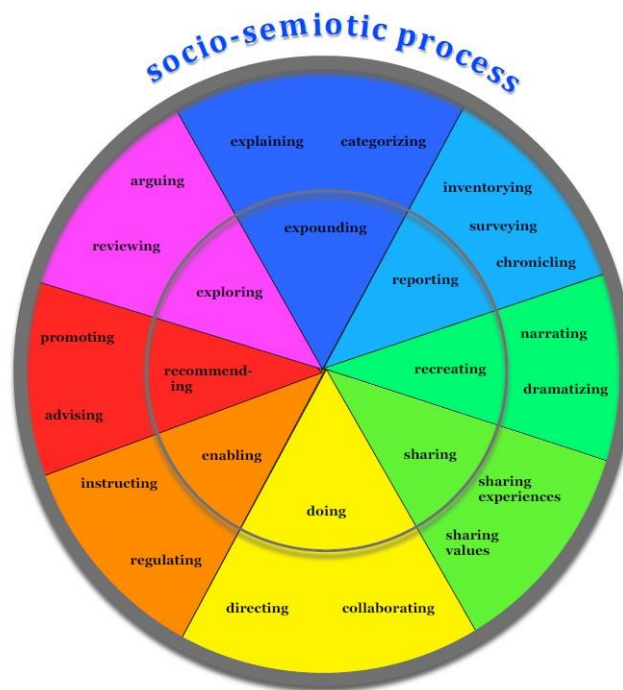


Figure 3.11 The typology of socio-semiotic processes (Matthiessen and Teruya, 2016)

Given these four advancements, Matthiessen takes **FIELDS OF ACTIVITY** as the point of departure, generalising the nature of registers in terms of socio-semiotic processes. In the topological representation, these processes are diagrammed as the innermost circle. This field-based view of register intersects with the tenor, mode and of field itself, yielding three complementary views of contextual matrix, *viz.*, field-mode matrix, field-tenor matrix and field-field matrix ⁴² (Matthiessen, 2015b, p. 74). Within each contextual matrix, contextual variables are represented as additional concentric circles (Matthiessen, 2015b, p. 73; Matthiessen and Slade, 2010, p. 384). By mapping the intersection of fields of activity with

⁴² This, by no means, suggests that registerial cartography can only accommodate two contextual parameters. As explained by Matthiessen (2006, p. 39), the intersection of two parameters is preferred because ‘it is just difficult to work out and diagram all combinations of field, tenor and mode values’. Indeed, these three contextual matrixes are not separated but are essentially complementary account of registers.

these additional variables, one could obtain an array of contextual territory; each of which represents the situational contexts of language in use. Viewed in this sense, registers are thus not conceptualised as individual functional verities; they are, in essence, related to one and other. The totality of the registers identified in these territories serves as the overall registerial spectrum of a given language (Matthiessen, 2015b, p. 73 – 74).

An exhaustive and robust mapping of register based on its contextual configuration has shed illuminating light in a number of registerial studies (see Matthiessen, 2015b, p. 38 – 44 for a discussion on its application). One remarkable example is Matthiessen's work in healthcare communication/medical discourse. Matthiessen and his colleagues elsewhere have demonstrated how this 'pie model' can be employed as a tool in surveying the overall registerial landscape in medical discourse, and more specifically, illustrate how the fields of activity of these registers relate to the values in MODE OF DISCOURSE and those in the TENOR OF DISCOURSE typologically (Matthiessen, 2013, p. 454; Matthiessen, 2015b, p. 26). If we follow Matthiessen's registerial approach, it follows that doctor-patient communication embodies two interpretations:

- 1) Viewed from a macro-perspective, the doctor-patient communication within the patient journey is interpreted as 'recommending: advising' in a sense that its primary concern is to 'arrive at a solution to the medical problem a patient is experiencing' (Matthiessen, 2013, p. 452). In this sense, the contextual act of giving advice constitutes the nucleus field of activity; it is the 'centre of gravity' among the entire register.

- 2) Viewed from a micro-perspective, the entire doctor-patient communication is comprised of a series of fields of activity, ranging from, *reporting*, *doing*, *expounding* etc, each of which corresponds with the generic stages of the medical consultation, and the completion of these micro socio-semiotic processes contribute to the achievement of the goal of doctor-patient communication (cf. generic stages in text structure, see Halliday and Hasan, 1985; Hasan, 1994; Hasan, 2009f, Hasan, 2014b).

Figure 3.12 illustrates a preliminary sketch of doctor-patient communication within patient journey of emergency departments in terms of registerial cartography. Though the registers here are only provisional labels, it is sufficient to note that they are well accommodated in emergency context.

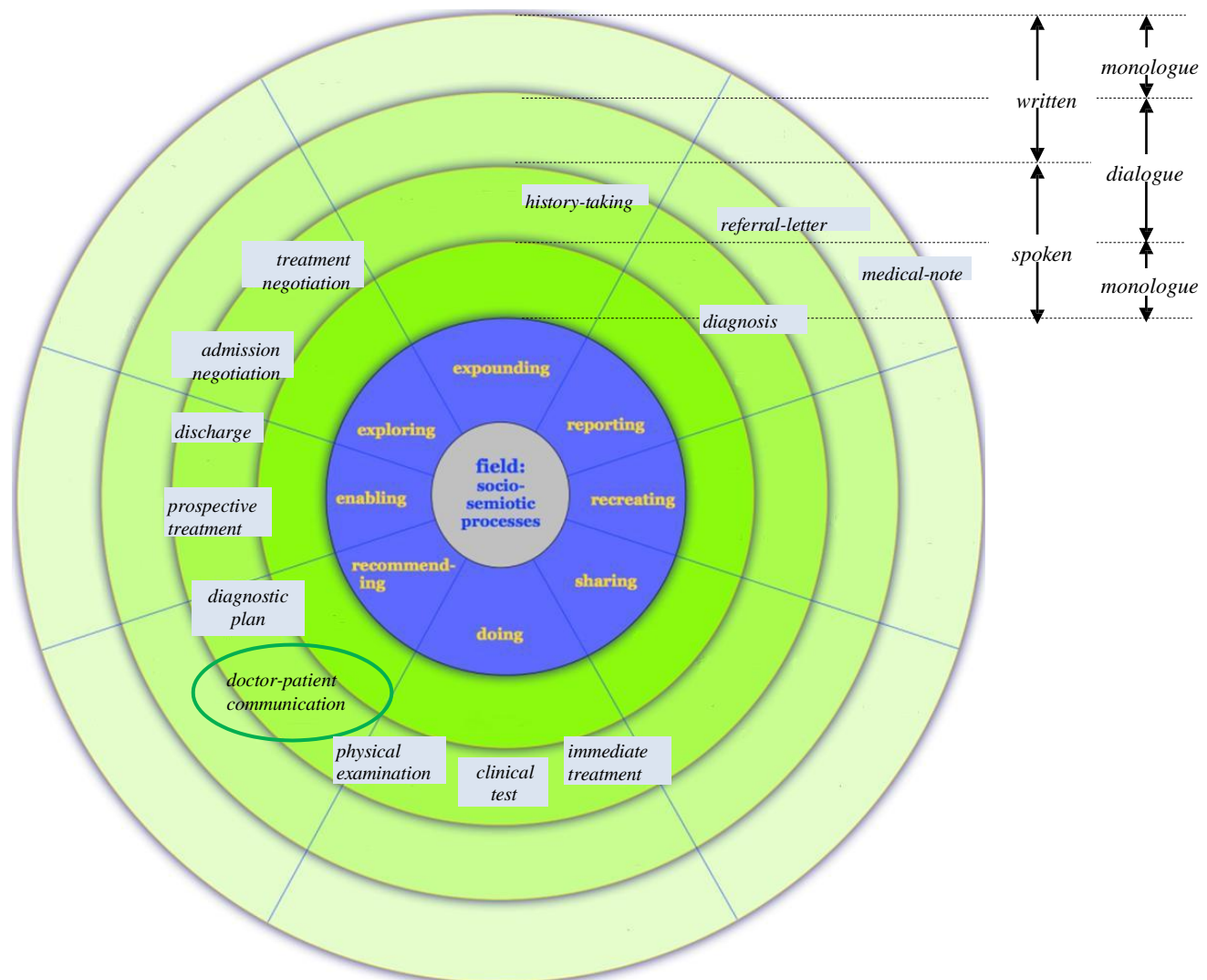


Figure 3.12 Locating ‘emergency communication’ and its sub-registers in registerial cartography in terms of FIELD OF DISCOURSE (i.e. FIELD OF ACTIVITY) and MODE OF DISCOURSE

3.9.2 Hasan's contextual configuration (CC) – a descriptive approach

Among all systemists, Hasan is perhaps the one who has made the most profound contribution to the conception of 'context' in Hallidayan SFL. This is not surprising because context, in Hasan's perspective, is always a prerequisite to understanding and describing language since 'speaking is done with reference to the context of social living' (Hasan, 1999, p. 219). Given that language is always done in society, Hasan, for her almost 55 years in academics, has devoted herself in theorising the conception of 'context'. One key theoretical move that Hasan has made in this area is her refinement of the scope of context, clarifying its place in Hallidayan systemic functional model, exploring its relations with other theoretical concepts and most importantly, extending the descriptions of the three contextual parameters in a systemic manner. Like Firth and Halliday, Hasan models the contextual parameters at the system pole i.e. context of culture (Hasan, 2009f, p. 175, see also Hasan, 1978, 1995, 1999; Halliday and Hasan, 1985).

Starting from a small set of sub-categories in the FIELD OF DISCOURSE, TENOR OF DISCOURSE and MODE OF DISCOURSE in the late 1970s to her recent advocacy of paradigmatic description of context, Hasan has been advancing the systemic functional descriptions of context more than any other linguists within Hallidayan tradition, aiming at offering delicate, explicit and regularised descriptions of contexts. Given her profound development, it appears to me that Hasan's model of context is essentially a wealth of conceptual tools in contextual description, offering illuminating insights on the contextual stratum (cf. Poynton, 1985, Martin, 1992 and Butt, 2003; Bowcher, 2014; Matthiessen, 2015a, b; Berry, 2016). For the discussion of the tripartite descriptions of context, I will draw mostly on Hasan's early works on contextual

description (e.g. 1973, 1978, 1985, 1995, 1999 and many others). Though such ‘schematized statements’, in Hasan’s (1979, p. 381) term, lack ‘checkable criteria’ and rely on ‘common sense’ (Hasan, 2009f, p. 179), the extensive applications in the literature in the past decades have proven that they are delicate enough to illuminate various dimensions of the three contextual parameters⁴³.

3.9.2.1 Contextual variables in the FIELD OF DISCOURSE

FIELD OF DISCOURSE concerns the nature of the social activities relevant to language, or more specifically, the ‘action we undertake using language’ (Hasan, 2009f, p. 178). For Hasan, only the actions related to language is relevant to the FIELD OF DISCOURSE. Had the social actions been performed ‘in the absence of discourse’, such actions, in Hasan’s view, would not have been an object of study in linguistics because ‘there would be no activity for linguists to analyse’ (Hasan, 1999, p. 276).

In the most general sense, the **SOCIAL ACTION/ACTIVITY** of doctor-patient communication is professional medical consultation. Obviously, the medical social activity entails an enormous number of healthcare-giving activities, each of which involves different degree of languaging. According to Hasan, the various degrees of languaging in social activities lead to different types of social action. In Hasan (1999), these social actions are categorised as [material action]

⁴³ While it would be illuminating to adopt contextualisation system networks – a consciously and carefully prepared framework so that one could illustrate how the relevant context can be realisationally related to the lexicogrammar via semantics, regrettably, such an approach is still of ‘nascent stage’ (Hasan, 2009f, p. 181 - 182), with only some tentative fragments being published (see Hasan, 1999, 2009 and 2014). Apparently, further testings and examinations are needed. See Lukin (2016, p. 149) for a brief discussion on the issues of contextualisation system networks.

and [verbal action]⁴⁴. The categorisation of either material action or verbal action is, indeed, not of itself novelty. Early in the mid of 1950s Hasan has already conceptualised the notion of social activity as ‘both action and locution, both material and verbal action’ (Hasan, 1999, p. 271). These actions, in Hasan’s view, are not separated but are essentially co-operating in the sense that they may interact with one another, yielding different combinations between these two classes of actions (see Hasan 1999, p. 276 - 280 for details).

A [material action] is that the social action is of itself physical, and language plays only an ancillary role (Hasan, 1995, p. 240, see SOCIAL ROLE in the MODE OF DISCOURSE for detail). That is to say, the actions are essentially of material nature, and languaging enters into these social actions in an ancillary manner so that the interactants could engage in the material action by ‘bring[ing] it to its completion’ through language (Hasan, 1995, p. 251, cf. FIELD OF ACTIVITY ‘*doing*’ in Matthiessen *et al.*, 2010). In other words, such social activities entail both verbal and material actions; the two actions ‘coalesce into one activity’ (Hasan, 1999, p. 276). Examples of such in the doctor-patient consultation include *physician examining the wounds, performing venipunctures, dispensing paracetamol tablets* etc. Typically, these actions involve minimal degree of languaging – the doctors instruct the patients to undertake the medical activities through language. The role of language is thus ancillary in the sense that its occurrence only facilitates the performance of the medical actions.

⁴⁴ Here, I restricted the FIELD OF DISCOURSE to the idea proposed by Hasan (1999), though I acknowledge her recent claim that her conceptions of Hasan’s (1999) field networks might be ‘ill-formed’ (see Hasan, 2009f, p. 189). In Hasan’s (1999) field network, the FIELD OF DISCOURSE permits an entry to four simultaneous systems, entitled MATERIAL ACTION, VERBAL ACTION, SPHERE OF ACTION and ITERATION, each of which concerns the various aspect of action. As explained in footnote 10, this study does not adopt system network approach to describe context. Hence, the latter two systems would not be discussed.

Whereas [material action] is concerned with physical action, [verbal action], by contrast, refers to those activities which are ‘wholly constituted by language’ (Hasan, 1995, p. 240, cf. FIELD OF ACTIVITY such as ‘*reporting*’, ‘*sharing*’, and ‘*explaining*’ in Matthiessen *et al.*, 2010). That is to say, the social activities are essentially semiotic in the sense that they cannot be performed excepted by languaging (Hasan, 1999, p. 276). In other words, languaging enters into these social practices constitutively – language serves as a constitutive role of these activities (see SOCIAL ROLE in the MODE OF DISCOURSE for details). Examples of this in the doctor-patient consultation include *history-taking*, *treatment plan negotiation* and *discharge*. The role of language in these social activities is by and large constitutive – it is only through the use of language so that these social activities can be carried out.

In addition to **SOCIAL ACTION/ACTIVITY**, another contextual variable which deserves to be noted in the FIELD OF DISCOURSE is **GOAL/PURPOSE**⁴⁵. As remarked by Hasan, goal is ‘the inherent aspects of human social action’ (Hasan, 1999, p. 234). In other words, every social action is goal-oriented. In elaborating the conception of goal, Hasan introduces the notion of *cline of goal awareness*. For Hasan, goal is not a discreet entity but a continuum, with two endpoints which she terms as [visible] and [invisible] respectively. As explicated by Hasan, whether a goal is visible or invisible is a matter of tendency, which depends largely on the ‘awareness of social agents’, or more specifically, their ‘conscious mental states’ rather than the types of the social activity (Hasan, 1999, p. 234 - 235). To further clarify the fuzziness of goal, Hasan relates the goal visibility to the goal duration, suggesting that visible goals *tend to*

⁴⁵ It should be emphasised that while the notion of goal has been well-accepted in both Halliday’s and Martin’s systemic functional models, their treatments of goal, as remarked by Hasan (1999, p. 234) are slightly different. To avoid any confusion, the goal adopted here refers only to Hasan’s interpretation of *goal* in Halliday’s model.

be short-term, that is, they are typically achieved within one interaction. Invisible goals, by contrast, *tend to be* long-term, which, in most cases, entail a series of interactions; each of which bears some logical relation to each other (Hasan, 1999, p. 234)⁴⁶.

If Hasan's view is upheld, it follows that the social activities of medical consultation, like most social practices in our society, entails not a simple goal, but an array of goals. This array of goals is of primary and secondary order, and relates to field and tenor respectively. Regarding the primary goal of medical consultation, one can further distinguish it into main-goals and an array of sub-goals. These goals are both recognised by doctors and patients. In a general sense, the *main-goal* of the medical consultation is [visible] i.e. patients seek medical advice from doctors and doctors offer medical treatment to patients in the emergency departments.

As one could predict from the emergency context, this main-goal tends to be [long-term] in the sense that it entails a series of medical interactions. In other words, to achieve the main-goal, both doctors and patients need to accomplish an array of *sub-goals*, corresponding to the various stages in medical consultations; and the accomplishments of these sub-goals are contributory to the accomplishment of the main-goal. These sub-goals, like main-goal, are [visible], [field-oriented] but [short-term] so that the accomplishment of these visible sub-goals enables doctors and patients to proceed from one stage to another. For example, the goal of *history-taking* is to solicit patient's medical condition. The sub-goal is essentially visible, field-oriented and short-term so that accomplishing this goal could facilitate the doctor to achieve the main-goal (See Chapter 7 for a detailed discussion on how these field-oriented,

⁴⁶ As remarked by Hasan, goal visibility and goal duration are two different conceptions; and one should not regard visible/invisible goals as the synonym of short-term/long-term goals. See Hasan (1999, p. 234) for details.

short-term goals are manifested registerially as generic stages in ED doctor-patient communication).

As both doctors and patients engage with a series of healthcare activities in the emergency context, this essentially develops a secondary goal *viz.*, doctors aim to maintain an ‘amiable, cooperative social relation’ with patients (Hasan, 1995, p. 229 and p. 256). This secondary goal is typically [tenor-oriented], [invisible] and [long-term]. The emergence of this secondary goal is, perhaps, not surprising because the field-oriented social activities discussed above do not exist in a vacuum – they are essentially bounded by the corresponding social relation i.e. doctor – patient relation (see *ROLE in the TENOR OF DISCOURSE* for details). In this sense, as doctors and patients go through the medical activities, their engagement will in turn ‘act on the social relation’ (Hasan, 1995, p. 230) so that the maintenance of a positive interpersonal relation between doctors and patients become more and more important.

Given that doctors are the primary healthcare-giver in medical consultations, it follows that throughout the entire medical consultations not only do doctors have to be concerned with patients’ medical conditions, but also establish supportive and caring relations with patients, traditionally known as empathy and rapport building in healthcare literature (Chandler *et al.*, 2015; Slade *et al.*, 2008). In this study, it is found that the tenor-oriented goals are registerially manifested in various tenor-based generic stages (see Chapter 7 for a detailed discussion).

3.9.2.2 Contextual variables in the TENOR OF DISCOURSE

TENOR OF DISCOURSE is concerned with social relation, which is described under three major

sub-headings, namely ROLE, SOCIAL STATUS and SOCIAL DISTANCE (Hasan, 2009f, p.179, see also Hasan, 1973, 1978).

ROLE⁴⁷, or more specifically, SOCIAL ROLE (also known as AGENT ROLE in Hasan's term), refers to the roles 'relevant to the unfolding of the activity' (Halliday and Hasan, 1985 p. 56 cf. INSTITUTIONAL ROLE in Matthiessen *et al.*, 2010). While interactants may carry multiple roles in the activity, it is only those relevant to discourse that are of focused because they are involved in text production (Halliday & Hasan, 1985, p. 50). For Hasan, these roles are socially defined, which can be glossed as '*who is using language to communicate with whom*' within the discourse (Hasan, 2003 [1973], p. 242). These socially defined positional roles are generally not 'interchangeable' in the course of interaction in the sense that it indicates 'the rights and obligations of the bearer of the roles'. That is to say, the role allocation in an interaction 'act(s) on the nature of the social activity (Hasan, 1995, p. 230), defining what activity can be performed by each role.

In the medical consultations, the social roles to be focused are doctor and patient because they are the primary interactants who contribute to the creation of the medical discourse. These two roles are not interchangeable because they are bounded by the institutional context, and their respective roles define what social activity they can perform. For example, in the emergency departments, doctors are essentially trained medical expertise – they are institutionally

⁴⁷ According to Hasan, the notion of ROLE can be further distinguished into three sub-types. In addition to the social roles, there are also (i) textual roles (i.e. hearer or speaker) and (ii) participatory roles (either initiator or respondent). It should be emphasised that these three types of roles are not separated; they are essentially co-occurring so that every interactant in an interaction carries these three types of roles simultaneously. See Hasan (2011c [1978], p. 266 – 267) for a detailed discussion.

knowledgeable so that they have the authority to perform medical procedures over the patients (Thompson and Muntigl, 2008, p. 120). Patients, by contrast, are merely ‘followers’ in the sense that they, in most cases, do not have any presupposed medical agenda ⁴⁸ – they are healthcare-seekers who mainly follow the doctor’s lead, filling ‘the role that is constructed for them at each stage’ (Thompson and Muntigl, 2008, p. 122).

Another contextual variable which is subsumed in the TENOR OF DISCOURSE is SOCIAL DISTANCE, a component in tenor concerning ‘the interactive biography’, or more simply, the degree of intimacy among interactants (cf. FAMILIARITY or CONTACT in Matthiessen *et al.*, 2010). As remarked by Hasan, though one could predict the SOCIAL ROLE based on the situation type, such socially defined positional roles are not ‘a sure indication of the degree of personal distance’ between interactants (Hasan, 2003 [1973], p. 242). In other words, in accounting the social relation, it is important to take the degree of personal distance into account, acknowledging the fact that the SOCIAL DISTANCE would act on, if not, override the SOCIAL ROLES and SOCIAL STATUS and different styles of communication will be resulted (Hasan, 2003 [1973], p. 242; see also Hasan, 2009f, p. 179).

In profiling the SOCIAL DISTANCE, Hasan conceptualises it as a continuum, with two end-points which she terms as [maximal] and [minimal]. In Hasan’s view, minimum social distance refers to the fact that the interactants ‘know’ each other – the two interact have interacted fairly regularly before so that they can recognise each other as distinct persons (Hasan, 2011c [1978], p. 265). Maximum social distance, by contrast, suggests that the interactants barely know, or

⁴⁸ Of course, this relates to the degree of patient autonomy. It is possible that some patients enjoy a high degree of patient autonomy and would like to get involved in the processes of medical cares.

even do not know each other previously – they are essentially ‘strangers’ in the sense that they are not aware of ‘each other’s idiosyncratic traits’ (Hasan, 2011c [1978], p. 265). In other words, the maximum the social distance between the interactants, the lower the degree of familiarity, and vice versa (Halliday and Hasan, 1985, p. 57; see also Hasan, 2011 [1978], p. 265). In the medical consultations, doctors and patients are of maximum social distance because in most situations, patients are admitted to the emergency departments for emergency. In other words, unlike those follow-up visits, such admissions are typically perceived as ‘first encounter’ – the patients are presented as ‘strangers’ to the doctors for there is ‘no readily accessible medical records or established relationships’ (Slade *et al.*, 2015, p. 2).

In further elaborating the social relation, Hasan introduces another contextual variable, *viz.* SOCIAL STATUS. For Hasan, social status is concerned with ‘the degree of control (or power)’ that one participant could exercise over the others (Halliday and Hasan, 1985, p. 57; cf. POWER in Matthiessen *et al.*, 2010). In the medical consultations, the social status of the doctor – patient dyad is more or less hierarchic. This is perhaps not surprisingly if we view from its values of SOCIAL ROLE and SOCIAL DISTANCE. As aforementioned, the social roles of doctors and patients are institutionalised so that doctors are the authoritative interactants and patients are positioned as followers in the medical consultations. In view of it, doctors are of a superordinate hierarchic role and patients are of a subordinate hierarchic role, and more precisely, it is doctors who exercise greater power over the patients. For example, in the phase of history taking, it is *typically* the doctors who take the lead of history taking so that they could control over the patients, soliciting the relevant medical information which fits their medical agendas. This hierarchic social relation can also be seen from their SOCIAL DISTANCE.

As suggested by Hasan, in the institutional context, the greater the social distance, the more likely that the style of communication of the superordinate role would be [–tentative] and [+certain] whereas the subordinate role would be [+tentative] and [–certain] (Hasan, 2003 [1973], p. 235). Given that the social distance between doctors and patients are maximal, it is, therefore, reasonable that the communication style of doctors is of high degree of certainty, establishing a sense of authority over the patients. Had doctors and patients been too close to each other, doctors would have failed to establish an authoritative role, and more specifically, failed to exercise control on patients (cf. minimal control in casual conversation as in Egging and Slade, 2004).

3.9.2.3 Contextual variables in the MODE OF DISCOURSE

MODE OF DISCOURSE is concerned with CONTACT, or more precisely ‘what part of language is playing’ in discourse. Unlike FIELD OF DISCOURSE and TENOR OF DISCOURSE, MODE OF DISCOURSE is of ‘second-order category’ for it is only brought into existence by the existence of language itself (Matthiessen *et al.*, 2010, p. 77 and 144). In Hasan’s model of context, MODE OF DISCOURSE can be described under four sub-headings, *viz.* LANGUAGE ROLE, CHANNEL, PROCESS SHARING and MEDIUM (Hasan, 2009f, p. 179; see also Hasan, 2003 [1973]; Hasan, 2011c [1978], Halliday and Hasan, 1985 and many others).

The first contextual variable in the MODE OF DISCOURSE is LANGUAGE ROLE, which has been briefly mentioned when discussing SOCIAL ACTIVITY in Section 3.9.2.1. As the name suggests, LANGUAGE ROLE, concerns the role of language in the discourse – whether it is constitutive or

ancillary. For Hasan, LANGUAGE ROLE and SOCIAL ACTIVITY are closely related⁴⁹. Constitutive language denotes that the social activity is primarily conducted by language and the activity *per se* is essentially verbal; whereas ancillary language suggests that the social activity is typically material, that is, language is used as an instrument for undertaking the material action (Hasan, 2009f, p. 179). While the two categories appear to be ‘sharply distinct’, Hasan herself has asserted that they are, in essence, the ‘two end-points of a continuum’ (Halliday and Hasan, 1985, p. 57 - 58). In the medical consultations, except medical examination and initial treatment which are basically ancillary, all other social activities are primarily constitutive.

Another contextual variable which is subsumed in the MODE OF DISCOURSE is CHANNEL, a component in mode concerning “how ‘the said’ is made accessible to the addressee” (Hasan, 2011 [1978], p. 265). Unlike LANGUAGE ROLE, the value of CHANNEL is normally of ‘a clear boundary’ so that the modality that the addressee comes in contact with is either [phonic] or [graphic] – the former denotes that the messages ‘travel on air as sound waves’ whereas the latter refers to those which are conveyed through graven images or some forms of writings (Halliday and Hasan, 1985, p. 58). In emergency departments, the CHANNEL of the medical consultations is typically [phonic], that is, doctors and patients conduct face-to-face verbal consultations in the cubicles of the emergency departments.

Another contextual variable which is of focused is PROCESS SHARING, concerning the relation between text production and interactants. That is to say, it aims to highlight how the

⁴⁹ In Hasan (2009f), the role of language (ancillary/constitutive) is reallocated to the FIELD OF DISCOURSE, serving as the choices of VERBAL ACTION (see Hasan, 2009f, p. 183)

interactants engage with a text – whether it is ‘text-as-process’ or ‘text-as-product’ (Halliday and Hasan, 1985, p. 58; cf. TURN in Matthiessen *et al.*, 2010). Like LANGUAGE ROLE, PROCESS SHARING, in Hasan’s view, is conceptualised as a continuum, with two end-points which she terms them as [active] or [passive] respectively (Halliday and Hasan, 1985, p. 58). An active process sharing suggests that both interactants construct the text together – they are essentially sharing ‘the process of text creation as it unfolds’ (cf. dialogic in Matthiessen *et al.*, 2010) whereas as a passive process sharing implies that it is the addresser who takes the responsibility in text creation, so that the addressee come to the text as ‘a finished product’ (cf. monologic in Matthiessen *et al.*, 2010). As asserted by Hasan, PROCESS SHARING is particularly relevant to CHANNEL in the sense that a phonic channel tends to be of active sharing process whereas a graphic channel tends to be of passive sharing process (Halliday and Hasan, 1985, p. 58). In emergency departments, the PROCESS SHARING of the medical consultations is typically [active], that is, both doctors and patients share the process of text creation – they are essentially co-constructing the medical consultation dialogically through ‘patterned sequences of conversation structure’ (Thompson and Muntigl, 2008, p. 113; see also exchange structure in Slade *et al.*, 2008).

Last but not least, there is one important contextual variable in the MODE OF DISCOURSE which deserves to be noted *viz.*, MEDIUM. For Hasan, this contextual variable is concerned with ‘what language was doing’ in discourse (Hasan, 2009c, p. 179). Like PROCESS SHARING and LANGUAGE ROLE, MEDIUM is a matter of tendency - it is conceptualised as a continuum, ranging from [spoken] to [written]. Given that the medium of an interaction is a scalar system, interaction can thus be characterised into most spoken, most written, or more complex

categories in between such as written-as-if-spoken and written-to-be-read-aloud (Hasan, 2009f, p. 179). In emergency departments, medical consultations are conducted in spoken medium, that is, both doctors and patients communicate with each other verbally in the sense that the social activities entailed in the consultations are performed primarily through spoken language.⁵⁰ The descriptions of the contextual configuration (CC) of medical consultations in emergency departments are summarised in Table 3.4.

Table 3.4 The contextual configuration (CC) of doctor-patient communication in emergency departments

FIELD OF DISCOURSE	
SOCIAL ACTIVITY: professional medical consultation	
	The first-order social activity: health-care giving; patients seek medical advice from doctors; history taking, medical examination, diagnosis, treatment negotiation...
	The first-order social activity entails both material actions and verbal actions. The two classes of actions cooperate with one and other as the medical consultation unfolds ...
	The second-order social activity: doctors maintain an amiable, cooperative social relation with patients...
	The second-order social activity entails primarily verbal actions...
GOAL: an array of goals which varies with the order of social activity	
	The first-order social activity entails one main-goal and various sub-goals; both main-goal and sub-goals are field-oriented and visible; main-goal are long-term whereas as the sub-goals are short-term; the accomplishment of the sub-goals are contributory to the main-goal ...
	The second-order social activity entails a tenor-oriented, invisible, long term goal...
TENOR OF DISCOURSE	
SOCIAL ROLE: doctor-patient dyad	
	Doctor and patient are the two primary socially defined positional roles which contribute to

⁵⁰ Of course, written language is also used in medical consultation. For example, relevant medical information is jotted down by doctors in written medium in patients' medical charts.

the creation of the medical consultations.

SOCIAL DISTANCE: maximal social distance; low degree of intimacy

Infrequent contact between doctors and patients. Emergency departments run on shiftwork, and doctors are not fixed. Patients are admitted to emergency department for emergency. Patients are not allowed to choose doctors and doctors should not be able to pick and choose patients when they work. Typically, patients are positioned as 'strangers' to doctors, with no established interpersonal relations and no readily accessible medical records.

SOCIAL STATUS: near hierarchic ; high power distance

Doctors carry a superordinate hierarchic role and patients a subordinate hierarchic role, although the hierarchy is less prominent than before due to the prevalence of patient autonomy and a paradigmatic shift of medical consultation from *doctor-centred care* to *patient-centered care* and subsequently *relationship-centred care* in modern healthcare system.

MODE OF DISCOURSE

LANGUAGE ROLE: both ancillary and constitutive

Medical consultations in emergency departments are primarily constitutive, that is, the social activity is typically verbal and is conducted through languaging. Examples include phases like history taking, and treatment negotiation.

Only a few medical activities in the medical consultation are ancillary, that is, languaging is the instruments in undertaking the material actions. Examples include medical examinations and initial treatment.

CHANNEL: primarily phonic

Doctors and patients conduct face-to-face verbal consultations in the cubicles of the emergency departments; with medical information are recorded graphology, if not visually (i.e. drawings).

PROCESS SHARING: active process sharing

Both doctors and patients co-construct the medical consultation dialogically in the form of series of exchange structures.

MEDIUM: primarily spoken medium

Both doctors and patients communicate with each other in spoken medium; with medical information are recorded in written medium in patients' medical chart.

3.10 Chapter Summary

This chapter has offered a coherent and multi-perspective account of SFL. More specifically, it has reviewed the conception of language within Hallidayan SFL tradition, capturing not only the internal building blocks, but also the multidimensional space cross-intersected by the semiotic dimensions. The chapter has also reviewed relevant notions such as *context*, *situation type* and *register*; each of which lies as a solid foundation in contextual descriptions and semantic network development. Last but not least, the chapter ends with a detailed modelling of ED context based on Hasan's classical descriptive approach, viewing it as a linguistic construct, or more precisely, as a configuration of contextual values at risk.

Chapter 4

SEMANTIC NETWORKS

4.1 Introduction⁵¹

As set out in Chapter 1, one of the research motivations is to extend Hasan's semantic networks into Cantonese. In so doing, it is necessary to have a clear understanding of the fundamental conceptualisations of semantic networks. Chapter 4 is thus devoted to review a) the notions of semantic networks in SFL, b) its inherited conceptualisations and c) its research implication. To commence with, Section 4.2 will first review Halliday's sociolinguist semantic network – the first published work which defines the conceptions of 'semantic networks' in SFL literature. Having discussed Halliday's networks, Section 4.3 will move to a discussion on the theoretical constructs of Hasan's message semantic networks, highlighting how Hasan develops her own position in semantic descriptions by elaborating Halliday's networks. As illustrated in Fung (2016), it is these very elaborations and subsequent developments which constitute the basis of what is understood as 'message semantic networks'. To further highlight its theoretical position in SFL, I will situate Hasan's message networks within the architecture of language, outlining its semiotic position in language in context. Finally, Section 4.4 and Section 4.5 will address its research implications, illustrating that Hasan's message semantic network is not only a research approach in semantic variation research, but also a strong descriptive tool in discourse analysis which enables a variety of research problems to be tackled.

⁵¹ The present chapter is a modified version of Fung and Low (in press).

4.2 Halliday's sociological semantic networks

The first chapter in the history of the semantic networks opened in 1970s with published examples by Halliday (1973)⁵². Early in the 1970s, Halliday published the first paper on semantic networks, entitled *Towards a sociological semantics*. As the title suggests, a key point in Halliday's work is that the semantic description is grounded in Bernstein's theories of socialisation and social learning, and attaches fundamental importance to the connection between social context and linguistic meanings. In theorising the meanings accessible to speakers, Halliday recognises that verbal behaviour is essentially a phenomenon which can be described sociologically and linguistically. These descriptions, however, could not be related directly because the social system is 'wholly outside language' and the grammatical system is 'wholly within language' (Halliday, 1973, p.88). To relate these descriptions and illustrate how 'social meanings are organised into linguistic meanings' (Halliday, 1973, p. 72), Halliday proposed the idea of 'semantic network', defining it as a 'hypothesis about patterns of meaning' which forms a bridge between the 'behavioral patterns and linguistic forms' (Halliday, 1973, p. 75).

The semantic description is important in that it draws on the system network as representation, that is, meanings are represented as options within systems, and each option is systemically related to one another (Halliday, 1973, p. 68). These semantic options, as maintained by Halliday (1973, p. 68), are context-dependent in the sense that they reflect only 'what the

⁵²It should be emphasised that 1973 has also witnessed another so-called semantic network, which is proposed by Geoffrey Turner. Briefly, Turner's network, like Halliday, is designed to represent some semantic options in the context of maternal control. However, since his network is basically developed from Bernstein's coding manual of general regulative context, Hasan *et al.*, (2007, p. 704) argues the network is merely 'an initial try' in the sense that it only represents the potential recognised by the coding manual, but not the 'meaning potentials accessible to the speakers of English'. See Hasan *et al.*, (2007, p. 704 - 706) for a detailed discussion.

speaker can do, linguistically, in a given context'. In addition to being 'context-dependent, it should be emphasized that such an approach to semantic description is essentially 'strategic'⁵³.

As Matthiessen (1990, p. 324 - 325) writes:

When we approach semantics from above it is the interface between context and language that is highlighted. The role of semantics can be stated with respect to context as follows: semantics is the set of strategies for construing contextual meanings as linguistic meanings and thus moving into the linguistic system. Or if we focus on the notion of goal in particular, *semantics is the set of strategies for achieving some goal through symbolic activity*. This is a functional approach to semantics: it interprets semantics in terms of the uses it has evolved to serve in different communicative contexts (emphasis mine)

For example, Halliday (1973) postulates a semantic network of parental control, illustrating the sets of strategies that a mother could employ in the regulatory context⁵⁴. A strategic semantic system like this thus enables us to 'relate language to non-language' (Halliday, 1973, p. 72). That is to say, the strategies, or more specially, the goal-oriented symbolic activities, are semanticised as various semantic options⁵⁵. As shown in Figure 4.1, in regulating the behavior of a child, a mother could either select the option [**threat**] or [**warning**]; each of which serves as the point of entry to further sub-options. More specifically, the option [**threat**] denotes the actions that will be undertaken by care-givers, whereas the option [**warning**] refers to the

⁵³ For Matthiessen, being 'strategic' is important as it distinguish the semantic networks from a 'taxonomy descriptions of meaning' (Matthiessen, 2015a: 40). Other strategic semantics includes Turner (1987), Slade's (1996) description of semantics of pejorative evaluation in gossip.

⁵⁴ This contrasts with the description of semantics from below, or chooser and inquiry semantics (in Matthiessen's (1990) terminology), which is typically employed in the model of text generation. Examples include Matthiessen (1988b), Patten (1988) and Matthiessen and Bateman (1991) to name but a few. See Matthiessen (1988; 1990) for details.

⁵⁵ This, of course, does not exclude other forms of realisations. As remarked by Matthiessen (2015b: 45), if it is not realised semantically in language, it is more or less realised through other semiotic systems.

undesirable consequences that are likely to happen if the child does something that he or she is being told not to do. Important in this network representation is that not only are the options clearly identified and related, but are also specified in terms of lexicogrammatical realisation statements. That is to say, each semantic option is viewed from the lexicogrammatical stratum. Take **[physical punishment]** as an example. Halliday suggests that [physical punishment] is a sub-category of [threat], defining it as follows:

The 'threat' may be a threat of physical punishment. Here the clause is of the action type, and, within this, of intentional or voluntary action, not supervision (i.e. the verb is of the *do* type, not the *happen* type). The process is a two-participant process, with the verb from a lexical set expressing 'punishment by physical violence', roughly that of § 972 (PUNISHMENT) in Roget's Thesaurus, or perhaps the intersection of this with § 276 (IMPULSE). The tense is simple future. The Goal, as already noted, is you; and the clause may be either active, in which case the agency of the punishment is likely to be the speaker (*I* as Actor), or passive, which has the purpose of leaving the agency unspecified. (Halliday, 1973, p. 78, emphasis original)

In view of it, the semantic option **[physical punishment]** is lexicogrammatically realised as 'clause: action: voluntary (do type); effective (two-participant): Goal = you; future tense; positive; verb from Roget § 972 (or 972, 276)', as in 'I will smack you', 'Daddy will smack you' or 'You'll get smacked'. The total set of semantic options, together with their lexicogrammatical realisation statements, constitutes the 'register-specific semantic potential' (Hasan, 1996b, p. 114).

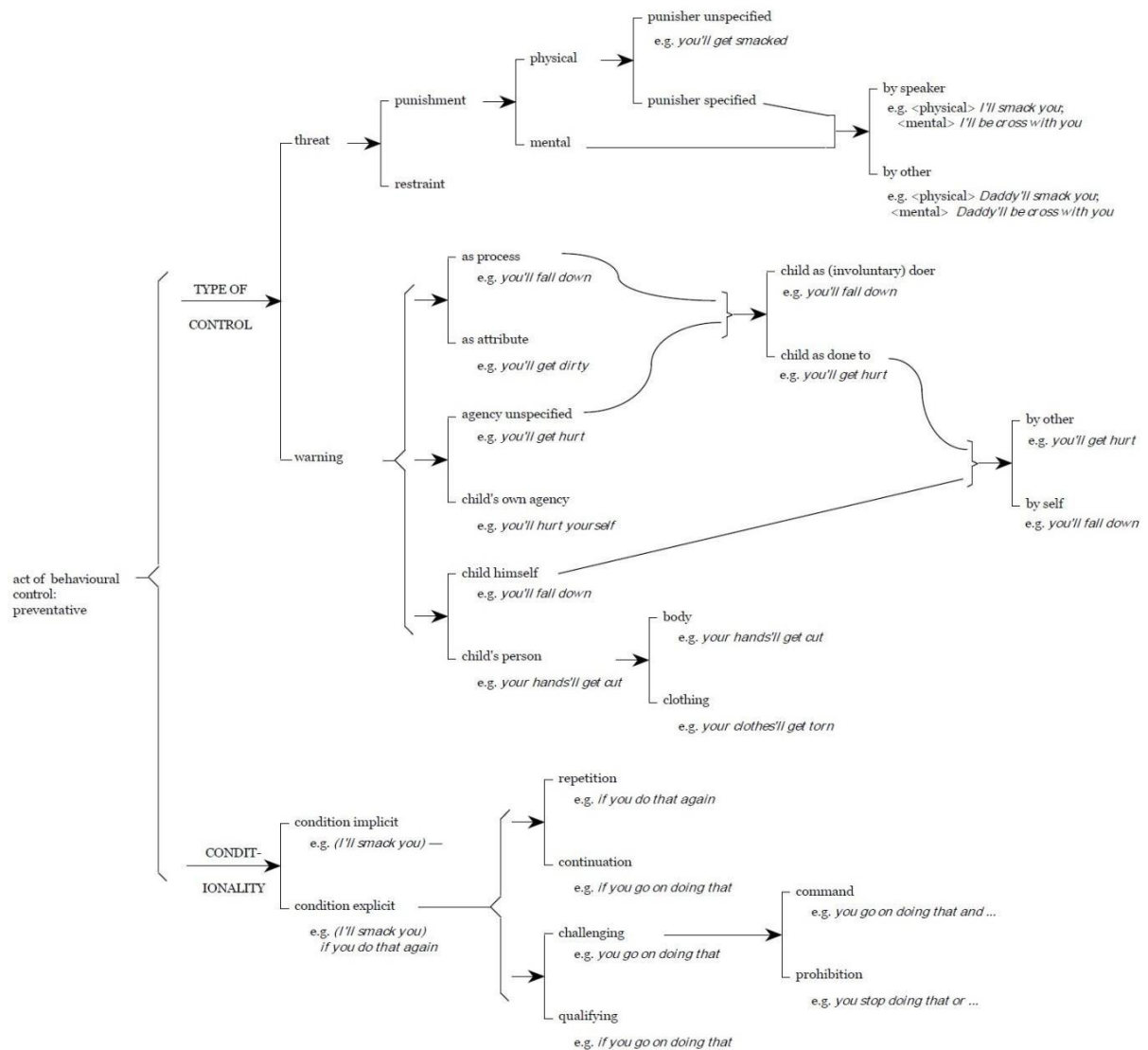


Figure 4.1 The semantic network of warning and threat (Halliday, 1973, p. 89)

4.3 Hasan's message semantic networks

Granted that semantic network postulated by Halliday in 1970s was still in a nascent form, it is not surprising that there remained much room for further development. With the subsequent advancement of SFL, the conceptions of semantic networks have been greatly refined and elaborated by Ruqaiya Hasan, one of the leading linguists in SFL. Such elaborations and developments constitute what we understand as Hasan's message semantic networks. The first publication of message semantic networks appeared in 1983 in a mimeo prepared for her project investigating the different ways of meaning construed in mother-child talk. Remaining unpublished and circulated only among her team members, this pioneering work served as the foundations of message semantics, semantic variation and sociolinguistic research. Despite the fact that her semantic description was developed specifically for semantic variation research (e.g. Cloran, 1994; Williams, 1995; Hasan, 2009), the past years have witnessed an increasing number of discourse studies featuring message semantics networks as the tool for the analysis of meaning (e.g. Hall, 2004; Wake, 2006; Hasan *et al.*, 2007; Wong, 2009; Chu, 2011; Lukin *et al.*, 2011; Lukin, 2012, 2013 and Fung, 2016). The major features of Hasan's message semantics include (1) open context, (2) unit of analysis, (3) trinocularly and (4) metafunctional regulation (see also Williams, 1995; Martin and Williams, 2004; Hasan, 1996b, 2009, 2013, 2014 and Fung, 2015).

4.3.1 Open Context

While Halliday's network was 'strategic' in nature, inviting a description of the meaning of a given situation (Matthiessen, 1990, 2013), Hasan's network has been developed to be contextually-open, an idea which can be related back to her strong research needs when

investigating the meaning productions in mother-child talk in 1980s⁵⁶. When investigating the meanings at play in her mother - child talk research, one pressing issue that Hasan has to overcome is how semantic networks could deal with contextual inconsistency. In Hasan's view, a situation-specific semantic network is less desirable, if not impractical in her research project because her mother – child talk data *per se* entails extensive contexts (Hasan *et al.*, 2007)⁵⁷. In other words, rather than following Turner's (1973) and Halliday's (1973) context-specific, sociological approach, Hasan conceptualises her semantic networks as contextually-open so as to accommodate 'within context variation' (Hasan, 1996b, p. 115). By distinguishing the terms 'specific context' and 'unique context', Hasan suggests that one specific context is not just one unique context. For example, there could be two systemically unique but related contexts that belong to one specific context. A contextually open network could thus generate a 'multiplicity of agnate contexts' for one specific context (Hasan, 1996b, p. 114 - 115).

Another justification of open context can be related to her ideas of 'context permeability'. Hasan (1973, 1995) elsewhere has shown that contexts bear permeability, suggesting that distinctive context specific semantic networks will eventually become permeable as the semantic specific descriptions developed. In other words, the 'actualised' semantic choices could in turn construe a wide range of contexts. In this sense, rather than perceiving the context specificity as a 'categorical one', she argues that one should view it as a 'relative matter' so

⁵⁶ Though semantic networks had been constructed in early 1980s by Hasan, they were not published but remained as mimeo (Hasan, 1983, 1985). It is not until 1989 when Hasan first disseminated her findings on semantic variation in naturally occurring mother – child dialogue, where part of the ideas of semantic network were discussed. In 1996, Hasan published another paper entitled 'Semantic networks: a tool for analysis of meaning' published, which addressed specifically the concepts relevant to her message semantic system networks.

⁵⁷ As illustrated in Hasan's subsequent work in contextual modelling, mother-child talk is essentially registerially/contextually inconsistent, entailing frequent reclassifications of con/text as the talk develops (see Cloran, 1999; Hasan, 1999, 2000 for a detailed discussion on con/textual shift).

that the semantic networks could serve as a ‘heuristic device for the definition of a specific class of context of situation’ (Hasan, 2009b [1988], p. 151). In so doing, she relocates the networks from the mid region of the cline of instantiation to the potential end of the cline, aiming at a description of general semantic systems, or more precisely, an account of the ‘meaning potential of English’⁵⁸ (Hasan *et al.*, 2007, p. 712, see also Fung, 2016). One important consequence is that semantic networks are no longer strategic, but essentially social in the sense that the approach focuses on the nature of the linguistic meanings in general.

4.3.2 Unit of analysis: *message*⁵⁹

Given that semantic networks are no longer register-specific nor strategic but essentially a part of the enterprise of language description, a theorisation of the semantic stratum appears to be necessary. In presenting a more general conception of semantic networks, Hasan postulates a hierarchy of units, or more specifically, a four-unit rank scale in English, moving from the highest to the lowest: *text* ~ *rhetorical unit* ~ *message* ~ *seme* (Hasan, 2013, see also Fung, 2016). As in other language-internal strata, these units stand in a relation of constituency, that is, a text is made up of rhetorical units; a rhetorical unit of messages, and a message of semes. Among the four units, Hasan regards *message* as the ‘ultimate descriptum’ in semantics (Hasan, 2014, p.10), defining it as ‘the smallest semantic unit which is capable of realising an element of the structure of a text’ (Hasan, 1996b, p. 117). For Hasan, it is this descriptum which serves as the object of enquiry in semantics, and is described exhaustively in system networks in

⁵⁸ Though the account of meaning potential is robust, such descriptions, as noted by Hasan, are not yet exhaustive. Further tests and applications are thus needed.

⁵⁹ It should be emphasised that the term ‘message’ is also used in another sense in SFL, denoting the textual unit of meaning (Halliday and Matthiessen, 2004, p. 588 – 589). In this chapter, message, following Hasan, refers to the semantic rank scale only.

terms of semantic options (for a recent account, see Hasan, 2013 and 2014). As pointed out by Hasan (1989, p.245), a message can be further categorised in terms of its productivity. A message which is productive and forms structural paradigms is termed a progressive message. That is, it concerns proposition/proposal exchange and is realised as a ranking clause at the lexicogrammatical level, except the clause is a projecting one⁶⁰. By contrast, a message which is non-productive and serves to manage the ongoing interaction is termed a punctuative message. The default realisation of punctuative messages is a minor clause, such as ‘*Hello*’, ‘*Sorry!*’ ‘*Hey*’. According to Hasan, it is only progressive messages which are metafunctionally regulated (for detail, see Section 4.3.4; see also Hasan, 2009, 2013 for a recent review). One strong implication of establishing the unit of semantic networks is that meaning analyses are distinguished from other semiotic systems but solidly founded on grammar.

4.3.3 Trinocularly

Following Halliday, each semantic option in Hasan’s message semantic network attaches fundamental importance to the ‘concept of trinocularly’ (see Halliday, 2009, p. 79 - 80). That is, Hasan’s semantic networks not only concern the inter-relations among semantic options (i.e. whether the options postulated are internally duplicate or contradictory (Hasan, 1996b, p. 110)), but also emphasise the relations with context (i.e. what contextual features are construed) and lexicogrammar (i.e. what lexicogrammatical patterns are activated). In other words, the analysis of meaning through utilising semantic networks not only illustrates the meanings at

⁶⁰ It should be emphasised that a message with a projecting clause is essentially pre-selecting the semantic feature [prefaced]. Hence, only the projected clause could not function as an element of text structure and they could not enter the semantic networks.

risk, but also enables analysts to explain ‘why and how something is said’ and ‘why these patterns of wordings appear rather than any other’ (Hasan, 2009f, p. 170).

4.3.4 Metafunctional regulation

In Hasan’s message semantics networks, semantic options are ‘multi-focal’ (Hasan, 1996b, p. 111) in a sense that they relate not only inter-stratally, but also metafunctionally, i.e. each semantic option pertains to the highly generalised functions of language, which are known as metafunctions. Early in 1970s, Halliday identified three metafunctions: the ideational, the interpersonal and the textual, where the ideational metafunction is further categorised into the experiential and the logical subtypes (see Halliday and Hasan, 1985). Central to this metafunctional hypothesis is that language is functional in a sense that the functions of a language are the ‘fundamental principle of language’ and is ‘basic to the evolution of the semantic systems’. It is thus a natural development that Hasan incorporates Halliday’s metafunctional hypothesis into her semantic descriptions, yielding metafunctionally regulated semantic networks. For Hasan, a progressive message entails four simultaneous systems:

- 1) system of interpersonal meanings, for example options in message function (questioning, informing, commanding...). Options in personal evaluation, point of view etc.;
- 2) systems of experiential meaning, for example the ascription of actional, evolutionary etc. roles, identification, definition; construction of time etc.;
- 3) systems of logical meaning, for example cause, condition, and meta-textual relations etc.;
- 4) systems of textual meanings, for example options in topic maintenance, topic changes etc.

Hasan (1989, p. 244)

These four systems of meanings are termed RELATION ENACTMENT, CLASSIFICATION, AMPLIFICATION⁶¹ and CONTINUATION respectively⁶² (Hasan, 2013). It should be emphasised that these four systems are simultaneous, that is, they are of equal status and no cluster of meaning is more powerful, or more important than the others. As one moves through the networks and chooses options, choices are made from most primary (at the left-hand end of the systems) to most delicate (choices at the right-hand end of the systems). The increase of degree of delicacy thus yields a full account of meanings within a single message. Figure 4.2 illustrates the overall organisation of message semantic networks. Hasan's proposal for metafunctionally regulated semantic networks, compared with Halliday (1973), constitutes a significant advance in semantic description because not only can subtle meaning differences be captured, but it also enables analysts to explore the calibration of context, semantics, and lexicogrammar (see Section 4.3).

⁶¹ It should be noted that the term AMPLIFICATION was previously used in Martin's earlier accounts of APPRAISAL (see Martin, 2000). However, it has been re-labelled GRADUATION in Martin and White (2005). Following Hasan, the term AMPLIFICATION used here refers to the semantic system of logical meanings.

⁶² *Contra* Halliday, Hasan separates the experiential metafunction from the logical metafunction, leading to four systems of meanings.

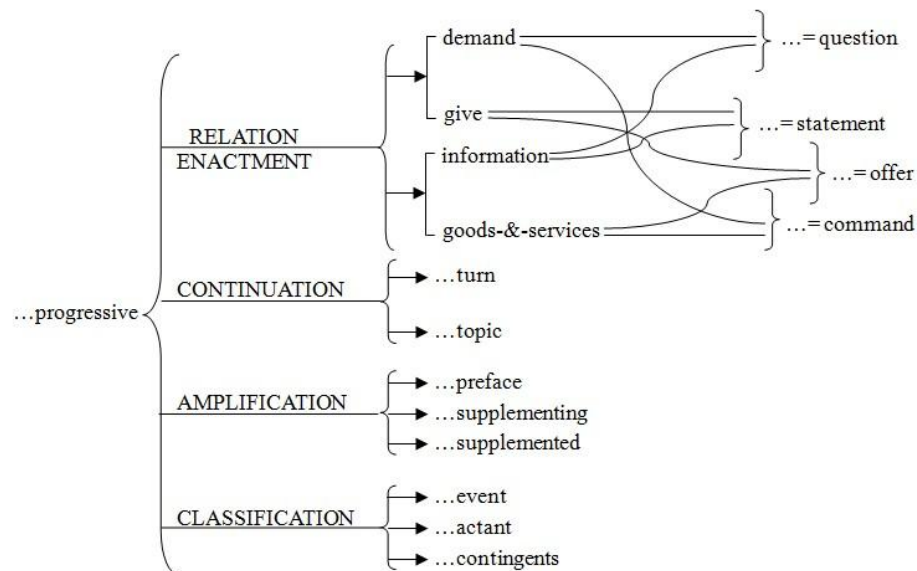


Figure 4.2 The overall organisation of English semantic networks of progressive message (Hasan, 2013, p. 286)⁶³

Gloss: (1) the arrow indicates the point of entry to the sub-systems
(2) the dots indicate the name of the sub-systems

4.3.5 Situating Hasan's semantic networks in SFL

Having discussed the elaborations and developments made by Hasan, let me situate her conceptions of networks within the architecture of language in SFL. As discussed in Chapter 3, SFL recognises six semiotic dimensions; namely *hierarchy of stratification*, *cline of instantiation*, *metafunction*, *rank scale*, *delicacy* and *axis* (see also Halliday and Matthiessen, 2014, Chapter 1).

Viewed in terms of *hierarchy of stratification*, Hasan's semantic network, as the name suggested, locates at the level of semantic. In SFL, semantics is a 'linguistic inter-level to

⁶³ Due to space constraints, Figure 4.2 only includes the primary sub-system for a message with the feature **[progressive]** under the four metafunctions. For example, the '...topic indicates the sub-system of CONTINUATION, selecting between **[turn-maintaining]** and **[turn-changing]**.

context' (Matthiessen, 1993, p. 227; see also Halliday, 2009; Hasan, *et al.* 2007; Hasan, 2009; 2010). It serves as the point of departure in describing and accounting for context and lexicogrammar. Semantic networks thus enable analysts to make sense of human life since most of our daily social practices are essentially 'acts of meanings' (Hasan, 2010, p. 267). As Hasan (2009f: 170) writes,

To put it simply, to explain why anyone says anything one must appeal to the context which exerts pressure on the speaker's choice of meaning; and to explain why these patterns of wordings appear rather than any other, one must appeal to the meanings which, being relevant to the context, activated those wordings: *semantics is thus an interface between context and linguistic form* (emphasis mine).

Viewed the strata vertically, there is a dialectic relation of *realisation* functioning across context, semantics and lexicogrammar. When looking from above, the contextual choices activate the semantic choices, which in turn further activate the lexicogrammatical ones. When looking from below, the lexicogrammatical choices construe the semantic choices, and in turn further construe the contextual configuration. Viewed each stratum horizontally, context, semantics and lexicogrammatical extend along the *cline of instantiation*, extending from the instance pole to the potential pole. Since semantic network is a 'hypothesis about patterns of meaning' aiming at specifying the total meaning potential, it locates at the potential pole of the cline of instantiation (Halliday, 1973, p. 327).

Viewed in terms of metafunction, Hasan's semantic networks are metafunctionally organised, resulting in four simultaneously networks. Features of each network are identified as semantic

options, which are organised along the *syntagmatic* and *paradigmatic axes*. Viewed along the paradigmatic axis, each option is realised in the lexicogrammatical system, known as lexicogrammatical realisation. By contrast, when viewing along the syntagmatic axis, each semantic option is organised along the *cline of delicacy*, moving from the general to specific. The set of the total selected semantic options is termed as ‘selection expression’ (e.g. Halliday 1973, Hasan 1996b, 2009; Hasan *et al.*, 2007). Figure 4.3 illustrates the location of Hasan’s semantic networks within the semiotic space of language.

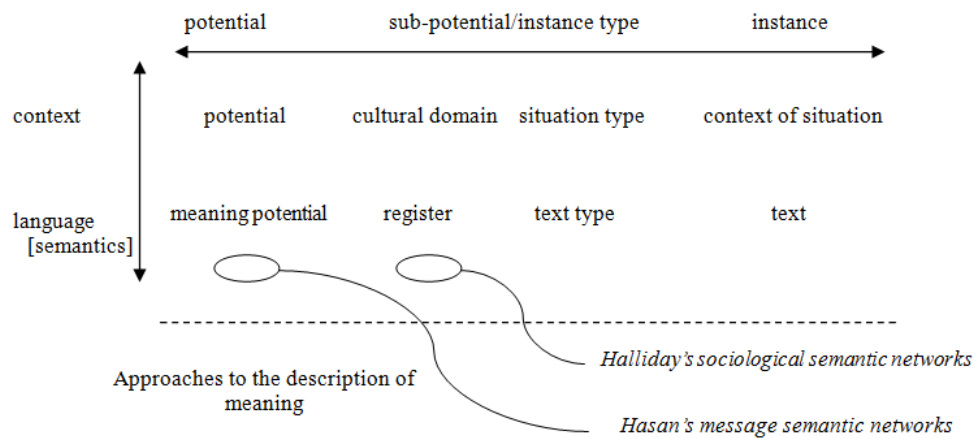


Figure 4.3 Locating Hasan’s semantic networks within the semiotic space of language (adapted from Matthiessen, 2015, p. 38)

As the above discussion shows, the elaborations and developments made by Hasan constitute a major advance in semantic description, leading to our current conception of ‘message semantics networks’ (e.g. Hasan, 1996b, Hasan *et al.*, 2007, Hasan, 2009). Such networks, as shown in the following sections, have a strong descriptive power which enables a variety of research problems to be tackled.

4.4 Primary application of semantic networks: semantic variation

As noted in our introductory section, the genesis of Hasan's semantic networks lies in the need to investigate semantic variation, the central research agenda of Hasan and her colleagues in the early 1980s (see also Cloran, 2000; Williams, 1995, 2005; Hasan *et al*, 2007 etc.). Sociolinguistic studies focusing on linguistic variations are not in themselves novel; they have a long history, with rich descriptive accounts focusing on phonological or morpho-syntactic variation (e.g. Labov, 1972, 1978). While the Labovian framework of variation has gained widespread acceptance in sociolinguistic research, Hasan's work on linguistic variation is unique and innovative in the sense that her approach is 'functional sociolinguistics' (Martin and Williams, 2004, p. 120). That is to say, it is meaning- and sociologically- oriented, and situated within the systemic functional model of language. Such a pioneering approach, as remarked by Hasan, reflects her dissatisfaction with sociolinguistic variation studies conducted in the 1970s, in terms of (i) analytical framework and (ii) variation explanations.

With regard to the former, Hasan recognises that variation frameworks which focus almost exclusively on phonology and lexicogrammar are essentially 'meaning preserving', thereby giving no place to meaning variations. For Hasan, neither phonology nor lexicogrammar is the 'site of socially significant variation' (Hasan, 2011 p. xxxvii) – it is the level of semantics which entails 'all the necessary characteristics of language varieties' (Hasan, 2009b [1988], p.144). Thus, rather than perceiving semantics as 'immune to variation' (Hasan, 1989, p. 269), Hasan takes semantics as the point of departure in her study, with a particular focus on the 'systematic differences in selection and organisation of linguistic meanings' (Hasan, 2009b [1988], p. 144, see also Hasan, 1989, 2009l [1990], 2009g [1991] and 2009h [1992]). Hasan

postulates that approaches to linguistic variation which feature no social theory in explaining variation are undesirable. In so doing, she turns to British sociologist Basil Bernstein, who postulates a coding orientation concerning the legitimacy and appropriateness of meanings⁶⁴. According to Bernstein, meanings do not exist independently from social realities. More specifically, it is social class, the ‘fundamental dominant cultural category’ (Bernstein, 1975, p. 175), which exerts ‘the most formative influence upon the procedures of socialisation’ (Bernstein, 1987, p. 37) (see Bernstein, 1971, 1990, 2000 for a detailed discussion).

Bringing these two perspectives together, Hasan argues that if linguistic meanings vary from one social class to another, it follows that the distinctive meaning patterns implicated by speakers will not be merely ‘expressive, stylistic matter’ which are ‘totally empty of cognitive content’ (Hasan, 2009 [1990], p. 116) but will correlate with the speakers’ social class. To investigate the extent of correlation, Hasan conducted an investigation focusing on 24 mother-child dyads (children aged between 3.6 to 4.2 years). These mothers and children were categorised into two contrasting social class groups termed High Autonomy Professionals (HAP) and Low Autonomy Professionals (LAP). According to Hasan, the distinction between HAP and LAP lies in the degree of professional autonomy of the breadwinners of the participating families. Breadwinners who exerted a high degree of autonomy in their workplace were categorised as HAP, and those who imposed little control over their working life and practices were classified as LAP. In Phase 1 of her mother-child talk research, Hasan (2009b [1988], p. 144) asks: *Does the selection and organisation of linguistic meanings vary in*

⁶⁴ ‘Meanings’ refers to all modalities of semiosis in Bernstein’s coding orientation. Hasan, by contrast, takes a restricted view of meaning, with a particular focus on the modality of language. Such a restricted view on coding orientation, in Hasan’s word, is termed semantic orientation.

correlation with variation in social class? If yes, then how can that variation be interpreted?

The most pressing issue in answering these questions concerns the way in which linguistic meanings are conceptualised and analysed so that viable claims can be made about the correlation between social class and meaning patterns. As discussed in Section 4.3.5, the very conceptualisation of meaning adopted in her network is a functional one. Central to the model of language is that it places much emphasis on society and language, and more importantly, the dialectic relation of realisation functioning across social organisation, social context and language (Hasan, 1989, p. 271). In this sense, one could estimate the meaning orientations based on the social class of speakers, and by the same token, one could predict the social class of speakers based on the ways in which meanings are construed. Hasan's message semantic networks thus serve as an objective analytical tool, illustrating the 'fashion of meaning' between HAP and LAP (Hasan *et al.*, 2007, p. 717). Conceptualising meanings as a network of semantic features, Hasan and her colleagues have successfully identified the robust pattern of variations of semantic features in terms of mothers' style of control (Hasan, 2009c [1992]) and questioning and answering behaviours (Hasan, 2009i [1989], 2009g [1991]).

It should be emphasised that semantic features identified typically do not exist in isolation but relate to others forming identifiable meaning clusters. As maintained by Hasan, language is not set of rules but behaviour, which can be measured and calculated through a principal components technique. The statistical calculation of principal components further suggests that meaning variations exist between HAP and LAP families are not merely a matter of individuation, but essentially sociologically-motivated, correlating with the social class groups,

or more specifically, the degree of autonomy in workplace. Hasan's findings thus suggest one fact: systematic meaning variations exist in social classes and such variations can be broadly predicted by Bernstein's coding orientation theory. Subsequent research adopting Hasan's approach in studying semantic variation also yields similar results. For instance, in the exploration of semantic variation in joint book-reading between families and schools, Williams (1995) has found that the types of supplementation and its configuration with speech functions differ significantly between the HAP and LAP.

4.5 Extended application of semantic networks: discourse analysis

The strong descriptive power of message semantics networks has attracted the attention of discourse analysts who are working on aspects other than semantic variation. This is perhaps not surprising because the primary objective of discourse analysis is the 'study of language in use' (Gee and Handford, 2012, p.1). The concern of 'language in process' in message semantic networks (Hasan, 1996b, p.124) thus fits into this research agenda. Table 4.6 summarises the most relevant discourse studies featuring message semantic networks as the research tool.

Table 4.1 Domains of message semantic networks application

Domain	Foci	Discourse studies
Legal	Court room	Maley and Hahey (1991)
	Police interview	Hall (2004)
Computer-mediated communication	Online chat	Wong (2009)
	Classroom teaching	Wake (2006), Chu (2011)
Education	Early childhood education	Eggins (1990), Kim (2014),

		Torr (2004)
Business	Service encounter	Hasan <i>et al.</i> , (2007)
Journalism	News interview	Lukin (2012, 2013)
	Surgical interaction	Lukin <i>et al.</i> , (2011)
Health and medicine	Doctor-patient communication	Fung (2016), Moore (2016)

Due to space constraints, the following section reports only two extended uses of message semantic networks in discourse analysis, and discusses the ways in which semantic networks are used and what their research implications are in discourse studies.

4.5.1 Semantic networks in pedagogical discourse

Hasan's message semantic networks have been applied in pedagogical discourse (e.g. Wake, 2006 and Chu, 2011). Wake's (2006) study, to a certain extent, shades into Hasan's (2009g [1991]) work, being concerned with how learning is achieved dialogically. While Hasan is concerned with mode of learning in mother-child talk, Wake focuses on dialogic learning in a group of second language international students, examining its effectiveness in the context of a university curriculum. Her case study analysis reveals an interesting phenomenon: students ask more questions than the tutor in the tutorial talk, with a frequent selection of **[explain]** in appraise questions and **[ask]**, **[check]**, and **[validate]**⁶⁵ in confirm questions. Central to this question distribution is that dialogic learning entails a shift of classroom dynamics. That is, contrary to traditional classroom learning contexts where tutors enact the majority of the questions, it is students who frequently pose questions to seek explanation and confirmation in

⁶⁵ By **[validate]**, Wake (2006) refers to questions which are realised by clauses preselecting [declarative: Adjunct right?], as in *the price is part of world price, right?*

the university context, thereby unwittingly changing ‘the focus and direction of the lecturer’s explanation’ (Wake, 2006, p.199).

Similar to Wake (2006), Chu (2011) applies semantic networks to the classroom context of a New Arrival Programme (NAP), with a particular focus on the newly arrived students in South Australia. Offered by the Department of Education and Children’s Services, NAP aims to prepare the newly-arrived students for learning the English needed for living and studying in South Australia. Chu aims to investigate the exploitation of meanings of visual and verbal modes in multimodal picture books, as well as the ways in which teachers engage with students during teacher-student interaction through picture books. Important in Chu’s (2011) work is that she reconceptualises the interpersonal functions of questions in the context of picture book reading, drawing on Hasan’s message semantic networks. Chu argues that even though teachers pose the same type of questions during picture book reading, the communicative functions vary in accordance with student literacy. For instance, while **[apprize: precise: specify]** questions are widely employed in both higher and lower literate students, their degree of interaction and points of enquiry differ. In higher-literate groups, the interaction between teachers and students is less restrictive, in the sense that teachers aim to invite students to contribute their ‘personal experience and ideas for interpretation’. In other words, questions selecting **[apprize: precise: specify]** in higher-literate groups aim to ‘probe further into students’ views or opinions’, as in ‘*what thoughts do you have?*’. By contrast, the degree of interaction between teachers and students in lower-literate groups is more restrictive, and the questions posed by teachers aim ‘to retrieve and to verbalise the found information’ of the multimodal texts, as in ‘*And what are the pictures we can see?*’ (Chu, 2011, p. 228).

4.5.2 Semantic networks in journalistic discourse

Another illuminating use of message semantic networks in discourse studies is Lukin (2012, 2013). Lukin's primary concern lies in journalistic discourse, or, more specifically, the professional performance of journalists in current affairs interviews. To investigate and characterise the mode of interviewing of Kerry O'Brien, the Australian senior political journalist of the Australian Broadcasting Corporation (ABC), Lukin (2013) adopts Hasan's message semantic networks, with a particular focus on the choices of meaning pertaining to questions. Focusing on Kerry O'Brien as a case study, Lukin argues that current affairs programs deserve particular attention because journalists in news interviews might not be performing the 'core democratic functions' of journalism⁶⁶ (Clayman and Heritage, 2002, p. 2), but working in the service of the interviewees, allowing them to construe the affairs in accordance with their own purposes.

Lukin's primary use of message semantics is to discriminate the meaningful choices enacted by the speaker. She analyses the O'Brien's questions from a multidimensional perspective, discriminating the choices of meaning in the systems of RELATION ENACTMENT, CONTINUATION, AMPLIFICATION and CLASSIFICATION. She finds that O'Brien's questions frequently select the features **[confirm]**, **[topic-changing]** and **[non-prefaced]**. According to Lukin, the feature **[topic-changing]** denotes a change of topicality in play, whereas **[non-prefaced]** refers to messages which concern 'what the world is like' rather than inquiring about 'someone's ... mental representation of the world' (Hasan, 2009g [1991]). The

⁶⁶ Examples of 'core democratic functions', as stated by Clayman and Heritage (2002, p. 2) include 'soliciting statements of official policy, holding officials accountable for their actions, and managing the parameters of public debate, all of this under the immediate scrutiny of the citizenry'.

combination of these features suggests that O'Brien only touches on the issue in a general sense, with fewer follow-up questions (i.e. **[topic-changing]**), and his questions fail to invite the mental representations of interviewees (i.e. **[non-prefaced]**). In other words, rather than encouraging the interviewees to account for their views concerning Iraqi invasion, Lukin argues that O'Brien's questioning is essentially following the interviewee's ideological direction, and his news interviews serve as the platform for those 'military experts', opening the floor to them to cast their messages in their own ways. Lukin (2013) demonstrates that Hasan's message semantics not only functions as a tool in discriminating the meanings enacted by speakers, but also a tool in revealing invisible ideologies in professional practices, or in Bartlett and Chen's (2013, p.10) words, making 'visible key features and functions of professional practice that are, or have become, invisible to the practitioners themselves and so to those being apprenticed into their practices'.

4.6 Chapter Summary

This chapter has highlighted the foundations of semantic networks – both Halliday's sociological semantic networks as well as Hasan's message semantic networks. More precisely, it has addressed the key advancements to which Hasan has contributed, the application in semantic variation studies, as well as the extended application in discourse studies. Brief as it is, the discussion is sufficient to demonstrate one fact, namely that *Hasan's message semantics network is essentially a discourse analytical tool enabling discourse analysts to study language in use in various contexts.*

Chapter 5

RESEARCH METHODOLOGY

5.1 Introduction

Chapter 5 concerns the research design of the entire project, which is organised in four sections. Section 5.2 introduces the project background of this current study. Section 5.3 details the operationalisation of research data, including data collection, data processing and data presentations. Building on the literature review in Chapter 2 to Chapter 4, Section 5.4 presents a specification of the general research questions (*G-RQs*). Organised within three research phases, the respective specialised research questions (*S-RQs*) correspond to three distinct stages of discourse analysis and in turn, the three broad research aims set out in Chapter 1. Finally, Section 5.5 illustrates the research procedures in carrying out the three research phases.

5.2 Project background

Prior to an enumeration of research data, let me first provide a brief account of a large scale Hong Kong-based, interdisciplinary research collaboration entitled *Emergency Communication: Improving the Quality and Safety of Patient Care through Effective Communication 2011-2013* funded by the Department of English of Hong Kong Polytechnic University in 2011. Led by Professor Diana Slade and Professor Christian M.I.M.M, this cross-disciplinary research study involved a team of PolyU academics and five medical practitioners from the New Territories West Cluster, Quality & Safety Division, Hospital Authority and the emergency department of Tuen Mun Hospital respectively. Table 5.1 summarises the details of the healthcare research team.

Table 5.1 The PolyU healthcare research team

Institutions	Members
The Department of English, <i>The Hong Kong Polytechnic University</i>	Diana Slade, Christian M.I.M. Matthiessen, Jack Pun, Elaine Espindola, Francsico Veloso, Marvin Lam, and Andy Fung ⁶⁷
New Territories West Cluster, Quality & Safety Division, <i>Hospital Authority</i>	Dr. K.S. Tang and Mr. Oliver Chan
Accident & Emergency Department, <i>Tuen Mun Hospital</i>	Dr. Simon Tang, Dr. K. L. Tsui

5.3 Research Data

5.3.1 Collection of Discourse Data

Given that this current study and Slade *et al.* 's projects are closely associated under the notion of 'data sharing', this section will only rehearse the data collection of ED discourse pertaining to textual analysis, but simply assume their ethnographic one is well-found (see Slade *et al.*, 2016, Pun *et al.*, 2016 and 2017 for their detailed reports).

⁶⁷ In this project, I was the research assistant of the healthcare team, and was responsible for non-participant observation, patient shadowing, audio-recording and Cantonese transcription.

5.3.1.1 Research Site

The research site of this study is the emergency department of Tuen Mun Hospital (TMH), one of the public acute hospitals in the New Territories West Cluster (NTWC)⁶⁸ of Hong Kong. Located in the centre of Tuen Mun (see Figure 5.1), TMH provides a wide range of public health services to around 1.1 million NTWC residents, ranging from emergency care services⁶⁹, in-patient services, ambulatory and community care services (Hospital Authority, 2017:3). ED service is, perhaps, among the essential services that an acute hospital should provide. Since 1992, the ED of TMH has commenced 24-hour emergency services to alleviate the increasing service demand arising from the NTWC residents. Unfortunately, the provision of this round-the-clock emergency care is of immense challenge due to the escalating emergency department attendances. According to the Hospital Authority (2010), the ED in TMH has recorded the 23,1610 attendances in year 2009 – 2010, the highest total attendance among all acute hospitals in Hong Kong.

⁶⁸ The public health services in Hong Kong are organised into seven hospital clusters based on their locations. According to Hospital Authority (HA), NTWC is the third largest hospital cluster, providing a wide range of healthcare services to the residences of Tuen Mun and Yuen Long districts.

⁶⁹ As reported in Hospital Authority (2017), the two public hospital emergency departments – Tuen Mun Hospital and Pok Oi Hospital (POH) – have managed approximately 339,700 Accident and Emergency (A&E) first attendances in year 2015 – 2016 (see <http://www.ha.org.hk/haho/ho/ap/csp-ntwc.pdf> for details)

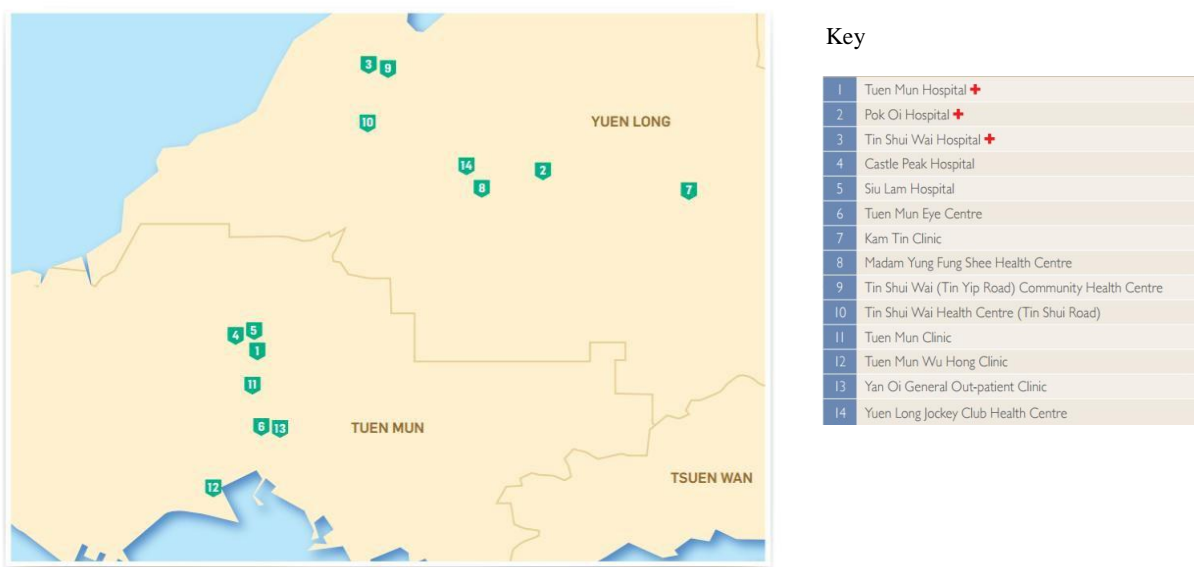


Figure 5.1 Tuen Mun Hospital (TMH) in New Territories West Cluster (NTWC) (adopted from Hospital Authority, 2017)

5.3.1.2 Research Subject

During the data collection period, the ED treated approximately 1000 emergency attendances per day. Though the patient demography had not been taken into account formally in the collection of discourse data, the 27-hour non-participant ethnographic observations as well as patient shadowings in ED suggested a large proportion of emergency attendances were over 50 years' old Hong Kong Chinese with a Cantonese-speaking background⁷⁰.

In this study, only patients triaged as Category III (i.e. *urgent*), Category IV (i.e. *semi-urgent*) and Category V (i.e. *non-urgent*) were approached. The reason is two-fold. In a practical sense, Category I (i.e. *critical*) and II (i.e. *emergency*) patients are of imminent life-threatening condition, which leave little time for research to obtain informed consent from participants. In

⁷⁰ This informal observation is in line with 2016 Population By-census Report (see <http://www.byccensus2016.gov.hk/en/>)

a linguistic sense, Category III, IV and V patients yield more standardised patient journeys in a sense that they are of similar waiting time and similar length of medical consultations.

To maintain data representativeness, patients were sampled under three work shifts in three different days. The data collection thus yielded ten patient journey (i.e. both audio recordings and patient shadowing) and twenty-eight-hour patient observations. Table 5.2 summaries the patients enrolled in this study.

5.3.1.3 Research Subject

Prior to patient shadowing and audio recording, patient informed consents were obtained so as to ensure a thorough understanding of the project and its potential consequences of their emergency care. All obtained consents were under the guidance and practices of the TMH Ethic Committee chaired by Dr Albert Kwong. The committee provided advice on the management of ethical and legal problems, application of ethics approval as well as assistance in data collection and its subsequent processing.

Table 5.2 Summary of patient enrolled in this study

Date of Emergency visit	Work shift	Patient Name	Gender	Triage Category	Ethnicity	Presenting concern	Language
15/09/2011	morning shift	Crystal	Female	3	Hong Kong Chinese	Chest pain	Cantonese
		Sean	Male	3	Hong Kong Chinese	Chest pain	Cantonese
		Paul	Male	3	Hong Kong Chinese	Chest pain, Bone fracture	Cantonese
		John	Male	3	Hong Kong	Chest pain	Cantonese

16/09/2011	afternoon shift	Robin	Male	3	Chinese Hong Kong Chinese	Chest pain	Cantonese
		Sam	Female	3	Hong Kong Chinese	Chest pain	Cantonese
		Billy	Male	3	Hong Kong Chinese	Chest pain	Cantonese
18/09/2011	night shift	Tiffany	Female	3	Hong Kong Chinese	Chest pain, vomiting	Cantonese
		Ada	Male	4	Hong Kong Chinese	Enterogastritis	Cantonese
		Kelvin	Male	3	Hong Kong Chinese	Enterogastritis	Cantonese

5.3.2 Data processing

5.3.2.1 Transcription, translation and Cantonese Romanisation

The collected discourse data were subsequently transcribed by me and other research assistant. Acknowledging the wide-acceptance of Conversation Analysis (CA) approach to transcription in healthcare communication research, this study, by contrast, employed Eggins and Slade's (2011, 2015) transcription convention. There are three underlying reasons for this:

- (i) Eggins and Slade's transcription convention, though developed originally for their casual conversation research, has been employed and tested in healthcare context such as clinical over and ED communication (see Eggins and Slade, 2011, see also Slade *et al*, 2015: xi);
- (ii) While both approaches treat spoken discourse as 'talk-in-interaction', the strong

emphasis on transcribing the various aspects of voice quality including *changes in pitch, loudness, tempo* appears less fruitful considering the physical setting in ED is always crowded and noisy.

- (iii) More specifically, the transcription of these vocal features appears less relevant to this current study in the sense that the central object of enquiry resides in the higher-ranking meaning units such as discourse and message.

For privacy reasons, patients' personal particulars (i.e. patient name and identity card number) were masked and replaced. Each transcribed text was organised under three columns, namely TURN, SPEAKER and TEXT. Each turn were subsequently numbered, following Eggins' (2004, p. 93) definition that 'the dynamic and sequence of talk in which one speaker takes turns after another speaker, and one sentence leading to another sentence'. Given that the language to be transcribed here is Cantonese, some English punctuation used in Eggins and Slade's transcription symbol list were replaced by their corresponding ones in Standard written Chinese. Table 5.3 illustrates the list of transcription key of this study.

Table 5.3 Summarised transcription key (modified from Eggins and Slade, 2012 and 2015)

Transcription Key	Descriptions
◦	full stop; certainty, completion; typically realised by falling utterance final intonation (see Fox <i>et al.</i> , 2008)
,	parcelling of talk; breathing time
?	questioning, uncertainty typically realised by rising utterance final intonation (see Fox <i>et al.</i> , 2008)
()	inaudible
(words within paraentheses)	uncertain transcription, indicating transcriber's guess
[words in square brackets]	contextual information or information suppressed
= =	overlapping or simultaneous talk
...	short hesitation within turns (i.e. less than three seconds)

[pause - 5 secs]	inter-turn pause length
–	flash start / restart

The transcriptions were then preceded to two processes:

1. Cantonese Romanisation

The ten transcripts were then romanised, following the scheme developed by The Linguistic Society of Hong Kong (LSHK).

2. English Translation

Each transcript was translated into English by a research assistant. To enhance the accuracy of transcription, all transcripts were double-checked by me and another researcher.

5.3.2.2 *The analytical unit: message*

In order to perform a message analysis, the transcripts must first be divided into messages i.e. the analytical unit of Cantonese message semantics. Semantically speaking, a Cantonese message is defined as the smallest meaningful unit in the Cantonese semantic rank scale which is capable of realising an element of the structure of text. Lexicogrammatically, a message is realised by a clause. Cantonese messages, like the English one, can be either [**progressive**] or [**punctuative**] – the former is realised by a [*major*] clause whereas the latter [*minor*] clause (For detailed discussion, see Chapter 6).

5.3.2.3 Sample coding sheet for data analysis

For each metafunctionally regulated system, a coding sheet was employed to record the activated semantic features of each message. Figure 5.2 presents an excerpt from a coding sheet of the system of RELATION ENACTMENT.

1 2	S	Ex	Msg ID	Message	Speech Function		[progressive]/ [punctuative]	[confirm]/ [apprize]	[ask]/ [validate]	[verify]/ [check]	[vague]/ [precise]	[explain]/ [specify]	[invite]/ [request]	[reason]/ [method]	[scope]/ [nucleus]
					Initiation	Response									
3	D	1	1	(1) Crystal											
4	P	1	2	(2) hai6 hai6 hai6 hai6											
5	D	2	3	(3) nei5 hou2											
6	D	4	4	(4) jau5 mou5 joek6 man6 man5 gam2 aa3 ?	Q1										
7	P	3	5	(5) e6 ... jau5 aa3		A1									
8	P	6	6	(6) jau5 zek3 tau4 wan4 go2 di1											
9	D	7	7	(7) dim2 wan4 gaa3 ?	Q2										
10	P	4	8	(8) e6 ... ngo5 sik6 zo2 keei5 nei1		A2									
11	P	9	9	(9) wui2, e6, go3 zeo2 me2 gaa3											
12	P	5	10	(10) e6 ni1 zek3											
13	D	11	11	(11) zeo2 me2?		Q3									
14	D	12	12	(12) me2 maa4 jat1 bin6 aa4 ?		Q4									
15	P	6	13	(13) hai6 aa3 hai6 aa3 !		A4									
16	D	14	14	(14) o2--o2--o2 *											
17	D	15	15	(15) hou2 laa1 *											
18	D	16	16	(16) gin3 mei1 si6 aa3?	Q5										
19	P	17	17	(17) e6 ... ngo5 gam1 cia4 cat1 dim2 zung1 hei2 san1 nei1		A5									
20	P	18	18	(18) zau6 tau4 wan4 laa3,											
21	P	19	19	(19) go3 jan1 nei1 dam4 dam4 zyun2 gam2 joeng2											
22	D	20	20	(20) m6,											
23	D	21	21	(21) hou2 aa3											
24	D	22	22	(22) cat1 dim2 zung1 hei2, hai6 mai1 aa3?	Q6										
25	P	8	23	(23) ==hei2--hei2 cong4.		A6									
26	D	24	24	(24) ==jau5 mou5 bat1 sing2 jan4 si6 go2 di1 aa3 ?	Q7										
27	P	25	25	(25) zkl1 hai6 dou1 cing1 sing2		A7									
28	P	26	26	(26) daan6 hai6 hang4 hei2 soeng6 lai4 nei1											
29	P	27	27	(27) zau6 zong1 haa2 zong1 haa2.											
30	D	28	28	(28) jau5 mou5 au2 dou3 gam2 joeng2 aa1?	Q8										
31	P	10	29	(29) e6 * mei6 jau5 au2.		A8									
32	D	30	30	(30) dou1 hai6 han6 dok1 dou2 ge3											

Figure 5.2 An extract of coding sheet documenting the semantic variables of RELATION ENACTMENT

5.3.2.4 Formatting and Layout

To investigate Cantonese semantics, the most pressing issue is to annotate the message component so as to increase one's understanding of the meaning being exchanged. While comprehensibility is the issue at stake, it is, indeed, a time-consuming and tedious task to provide an English gloss for each Cantonese lexeme. For clarity, three different layouts were adopted in the subsequent chapters.

Layout1Transcripts

Each transcript was presented in a three-column layout *viz.*, TURN, SPEAKER, and TEXT. Transcribed text within each turn was presented in (i) Cantonese characters and (ii) English translation.

Layout2Messagesemanticdescriptions

Each message was then numbered, romanised and organised as a four-line layout *viz.*, TURN, SPEAKER, MESSAGE ID and MESSAGE. For presentation, each message was subsequently formatted in four lines:

Line 1 concerns Cantonese Romanisation;

Line 2 gloss, or more precisely, the English gloss of both content words and function words – the former serves as the English equivalent whereas the latter the Cantonese-specific word classes;

Line 3 the functional labels, which make up the specific clausal configuration of each message;

Line 4 translation, emphasising on the *sense* of each message.

Figure 5.3 presents a four-line layout of message semantic descriptions.

	Turn	S	Msg ID	Messages				
Line 1: Cantonese Rominasation	22	D:	41	zung2 zi1	mui5 jat1 ci3	o1	jyun4	siu2 siu2
Line 2: Gloss translation				anyhow	every time	to shit	ASP	a little
Line 3: Functional labels					Adjunct		Predicator	Adjunct
Line 4: Translation				‘Anyhow, after getting a little of it out each time;’				

Figure 5.3 An illustration of transcription and translation formatting

Layout3GSPanalysis

In representing the GSP analysis, the extract was presented in a six-column layout *viz.*, GENERIC ELEMENT, TURN, SPEAKER, MESSAGE ID and MESSAGE (i.e. both Cantonese romanisation and English translation). Figure 5.3 presents a four-line layout of message semantic descriptions.

Activity Stage 2: Final Medical Consultation
Participant
D: Doctor
P: Crystal

G	Turn	S	Cantonese Messages	English Translation
PT	506	D	(251) == daan6 hai6 nei5 sik6 zo2	(251) but after taking it
PT	506	D	(252) gei3 zyu6 jiu3 gaak3 faan1 sei3 ng5 go3 zung1 zi1 hau6 sin1 sik6 faan1—	(252) but remember to take the second one after four or five hours
PT	506	D	(253) zik1 hai6 lyut3 zo2 dai6 ji6 —zik1 hai6 nei5 jat1 zan6 gaan1 heoi3 joek6 fong4 lyut3 joek6 ,	(253) that means take the second—that means you go to the pharmacy to collect the medications,
PT	506	D	(254) gam2 gaak3 faan1 ng5 go3 zung1 tau4	(254) then wait after around five hours
PT	506	D	(255) nei5 sin1 zoi3 sik6 kei4 taal joek6, hou2 mou5?	(255) before taking other meds, okay?
PT	507	P	(256) ==hai6 aa3 hai6 aa3 -	(256) ==Right-right.

Figure 5.4 Transcription format for GSP analysis

To sum up, this section has detailed the data collection and data processing of this current study.

5.4 Research Questions

As set out in Chapter 1, the two generalised *RQs* represent two aspects of works : (i) the Cantonese semantic networks and the its applications in register studies. Building on the literature reviewed in Chapter 2 to Chapter 4, these three *G-RQs* can be further divided into a number of specific research questions (*S-RQs*).

G-RQ1: How is the Cantonese message semantic networks conceptualised?

As discussed, *G-RQ1* is devoted to offer a systematic account of the Cantonese metafunctionally-regulated semantic systems, following Hasan's (1973) English message semantic approach. The *G-RQ1* can be further divided into four *S-RQs*:

- *S-RQ-1a*) How is message defined in the language system of Cantonese?
- *S-RQ-1b*) What are the key features of system of AMPLIFICATION?
- *S-RQ-1c*) What are the key features of system of CONTINUATION?
- *S-RQ-1d*) What are the key features of system of RELATION ENACTMENT⁷¹?

G-RQ2: What is the registerial identity of ED doctor-patient communication?

G-RQ2 aims to explore Halliday's notion of register through Hasan's idea of registerial/generalised structural potential (GSP) and her conception of 'message semantics' (cf. discourse semantics in Martin, 1992). More precisely, it addresses the 'text-wide meaning' of doctor-patient interaction from a 'top down' approach, examining it 'from above' (i.e. context), 'from roundabout' (i.e. semantics) and 'from below' (i.e. lexicogrammar and phonology). The *G-RQ2* can be sub-classified into four *S-RQs*:

⁷¹ Time constraint prevents an exploration of the semantic system network CLASSIFICATION. Personally, the system of CLASSIFICATION, in the least delicacy, overlaps with TRANSITIVITY in clausal grammar. This overlapping is, perhaps, not surprisingly for the descriptions of 'process', 'participant' and 'circumstance' are, indeed, semantic-oriented. (see Williams, 1995, p. 201 for his rationale). In view of it, the system of CLASSIFICATION is not included in this study.

- *S-RQ-2a)* Viewed ‘from above’, what is the contextual configuration of ED interaction?
- *S-RQ-2b)* Viewed ‘from roundabout’...
 - o *S-RQ-2b-1)* What generic elements can occur in this register?
 - o *S-RQ-2b-2)* How do these elements proceed sequentially throughout the emergency communication?
- *S-RQ-2c)* How does the context calibrate with semantics and lexicogrammar cross-stratally?
- *S-RQ-2d)* What is the GSP of the ED consultation and their respective AGSs?

5.5 Two research phases in the study

In responding to these three general research questions, discourse analysis – the main body of this study – is divided into three distinct phases; each of which features distinctive approaches and procedures in analysing ED discourse. Simply put, Phase 1 concerns the development of Cantonese message semantic networks; Phase 2 focuses on the registerial analysis of doctor–patient interaction, exploring the registerial identity and its structural potential .

5.5.1 Phase 1 Developing Cantonese message semantic networks

Developing Hasan’s message semantic networks from English to Cantonese is a huge academic enterprise, which, from a SFL point of view, is informed by both ‘theory’ and ‘description’ – the former grounds the (re)-conceptualisation and extension within the architectural dimensions of language whereas the latter treats the message semantic attributes “‘in its own right’ rather than being ‘anglocentric’” (Fung, 2016, p. 121).

5.5.1.1 Theoretical consideration: shunting across cline of instantiation and hierarchy of stratification

In a theoretical sense, the development of Cantonese message semantic networks, like other semantic descriptions in the SFL literature, is situated in the ‘multidimensional semiotic space of language in context’ (Caffarel, Martin & Matthiessen, 2004, p. 18). Granted that the Cantonese message semantic networks are located at the potential pole of semantic stratum, it appears that one could take the semiotic dimensions – *cline of instantiation* and *hierarchy of stratification* – as the point of departure:

- In terms of the *cline of instantiation*, one could develop the contextually-open Cantonese semantic networks from the instance pole (i.e. it starts with the instance end by analysing texts in a wide range of registers and makes generalizations based on the textual analysis, cf. inductive approach). In a similar vein, one could approach from the potential pole (i.e. the semantic systems of a given language start with the system end by expanding the overall potential through extending its descriptive delicacy, cf. deductive approach). While both approaches shed equal light on message semantic networks development, they, in actual practices, require abundant texts from a variety of registers so as to test/develop the overall meaning potential of Cantonese. Considering that this current study is just an initial mapping, this study particularly chooses the vantage point of sub-potential – the mid-way of the cline of instantiation – by taking register as the point of departure. In so doing, not only does it keep the current study in a manageable size, but also allows us, in Halliday’s (2002a [1961], p.

45]) term, to ‘shunt’ along the cline of instantiation. Important in this shunting is that it enables us to adopt a holistic view on the semantic resources, mediating the potential (i.e. the existing Cantonese description) and the instance (i.e. the textual analysis of patient journeys) *via* register.

- In terms of the *hierarchy of stratification*, one could develop the networks from a top-down approach so that s/he starts at the contextual stratum and ends with systems at the lexicogrammatical stratum (cf. ‘encoding view’ in Hasan, 2010, p. 276). By the same token, one could adopt a bottom-up approach in the sense that s/he starts at the lexicogrammatical stratum and ends with systems at the contextual stratum (cf. ‘decoding view’ in Hasan, 2010, p. 276). While both approaches are well-established in SFL literature, this study, by contrast, adopts an abduction approach – it takes semantics as the stratum in focus so that one could move up and down the hierarchy of stratification. Important in this shunting is, as Matthiessen (2013, p. 444), it offers a trinocular perspective towards semantics rather than ‘being limited to a single vantage point as an observer’, thereby contributing to an understanding of (i) the contextual realities in which semantic options realise (ii) the lexicogrammatical realisations, (iii) the validations of semantic options.

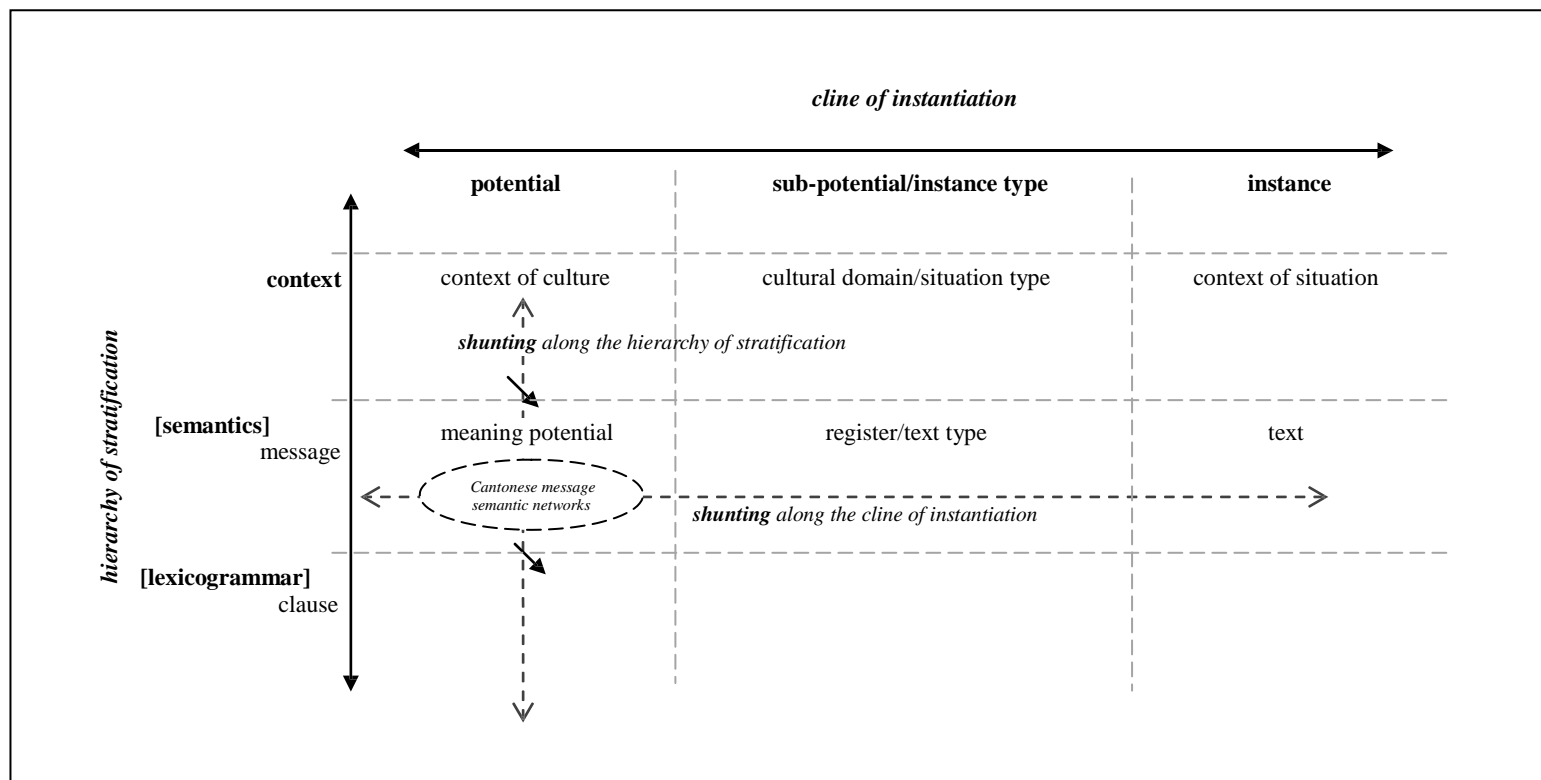


Figure 5.5 Approaches in developing Cantonese message semantics – shunting along the cline of instantiation and hierarchy of stratification

5.5.1.2 Descriptive consideration: guiding principles in developing semantic system networks

In a descriptive sense, the development of Cantonese semantic networks, like other multilingual/language typological studies, should never be ‘anglocentric’ so that the descriptions could capture the language-specific features of Cantonese in an objective, scientific and systemic manner. To achieve this aim, the most important question appears to be *In what ways can we develop Cantonese (message) semantic networks objectively, scientifically and systemically?*

To answer this question, it seems to me that one has to extend the networks through a set of objective criteria, which pushes the enquiry of Cantonese semantics towards a scientific endeavour. Elsewhere, I have proposed a set of guiding principles of ‘doing semantics’ so that the message semantic descriptions are ‘objective and scientifically valid’, or in Halliday’s (2003b [1992], p. 199) words, a ‘science of meaning’. Drawing on Halliday’s view on ‘doing science’ and ‘doing grammar’, and more specifically, his functional language model, these guiding principles have proved successful in mapping the Cantonese semantic options of QUESTIONING within systemic theory (see Fung, 2016 p. 121 – 122). With the experience of this initial trial, these guiding principles were subsequently elaborated based on what Matthiessen’s (2015b) five dimensions/strategies of systemic language description and typology, which include

- (i) theoretical guidance (i.e. Principle I, II and III);
- (ii) typological guidance (i.e. Principle X and VI);

- (iii) transfer comparison (i.e. Principle VIII and IX);
- (iv) analysis of registerially informed sample of texts in context (i.e. Principle IV) and,
- (v) use of language consultants (i.e. Principle VII).

In a practical sense, the elaboration in guiding principles pushes the descriptions towards the practices and approaches by systemists working in language typology/multilingual studies. Such advancement, in my view, shares equal light in developing Halliday's register-specific semantic networks and Hasan's contextually-open message semantic networks so that the developments are performed in an objective, scientific and systemic fashion. Table 5.4 presents the elaborated guiding principles adopted for this study.

Table 5.4 Guiding principles in developing semantic system networks

Principle	Descriptions
I	Semantic options that are used in the analysis of meaning are general concepts, which help us explain the semantic phenomena. They are not 'endowed with a spurious reality of their own' (cf. Halliday 2003b [1992], p. 200).
II	The semantic options are of two kinds: theoretical and descriptive. Theoretical semantic options are general to all languages while descriptive semantic ones are 'language specific' and are redefined in the case of each language' (cf. Halliday 2003b [1992], p. 201)
III	Both theoretical and descriptive semantic options are defined 'in relation one to another' but not individually (cf. Halliday 2003b [1992], p. 202).

- IV** The construction of semantic networks – either contextually-open or register-specific – should be informed (registerially) by samples of texts and evidence in data analysis (cf. Halliday 2003b [1992], p. 208).
- V** In identifying the descriptive semantic options, reference should *always*⁷² be made to authentic discourse in which ‘text is functioning in context’ (Halliday and Matthiessen, 2014, p. 3).
- VI** In describing the descriptive semantic options, the description is always approached from a trinocular perspective: (i) *from above*, (ii) *from around*, and (iii) *from below* (Halliday, 2003b [1992], p. 204). Thus, the validity of the semantic networks would be confirmed if the semantic options construe the recognisable contextual feature, and if they construe the lexicogrammatical patterns and if the semantic options relates to each other systematically (cf. Halliday 2003b [1992], p. 203).
- VII** To enhance credibility, all the fuzzy descriptive semantic options are consulted by native speakers of the given language, if necessary.
- VIII** When extending the semantic description from one language to another, one should acknowledge the fact that the semantic options available in the ‘language of reference’ might not be shared in the ‘language under description’ (cf. Halliday 2003b [1992], p. 204). Though options in the ‘language of reference’ could be set as the point of departure, considerations should be given on whether comparable options exist in the language under description, rather than taking the comparable options for granted (cf. Halliday 2003b [1992], p. 204).
- IX** In naming the semantic options, it is sensible to reuse the existing terminologies. However, it is important to note that the terminologies have to be reinterpreted,

⁷² Invented examples are used when no single instance is identified in the research data.

defined and explained within the language under description every time (cf. Halliday 2003b [1992], p. 207).

5.5.2 Phase 2 Registerial Analysis of doctor-patient interaction: GSP analysis

As set out in Chapter 1, one of the key research rationales is to explore the notion of ‘register’ in Hallidayan tradition: how is register described *structurally*, with what implications for understanding its nature in relation to discourse analysis. According to SFL, there are two possible perspectives in describing registerial structure potential, which can be identified by reference to Figure 5.6:

In terms of the *cline of instantiation*, one can account for the registerial structure descriptively from the system pole (i.e. the descriptions of sub-systems based on the account of the overall system) or instance pole (i.e. the generalisations based on the analyses of samples of texts).

In terms of *hierarchy of stratification*, one can describe the registerial structure from the vantage point of context (i.e. the descriptions of situation type at which the register is situated) or from lexicogrammar (i.e. the use of language within the given register).

While it is possible to shunt between the two perspectives, this study adopts a text-based discourse analytical approach. Viewing patient journey as a macro-register, it begins with the analysis of instances of medical consultation and end up with the descriptions of generic

elements as well as the registerial/generic structure potential (GSP). Following Hasan (1978, 1984, 1994, Halliday and Hasan, 1985 and many others), the descriptions of GSP and AGS are multi-stratal and is in line with Halliday's trinocularly. More precisely, it starts with the vantage point of context (i.e. 'from above'), characterising not only the contextual variables of *field*, *tenor* and *mode*, but also its inherited major 'contextual (re)classification' across generic elements of a text (Hasan, 2000). The contextual descriptions are subsequently supplemented by the choices in semantics (i.e. from roundabout), illustrating the meanings at risk of each semantic act within each generic element. The activated semantic choices within the acts are then supplemented by the view of lexicogrammar (i.e. from below), with an identification of lexicogrammatical patterns that are capable of realising the semantic strategies.

Figure 5.6 presents a diagrammatic summary of the research procedures of the three research phases.

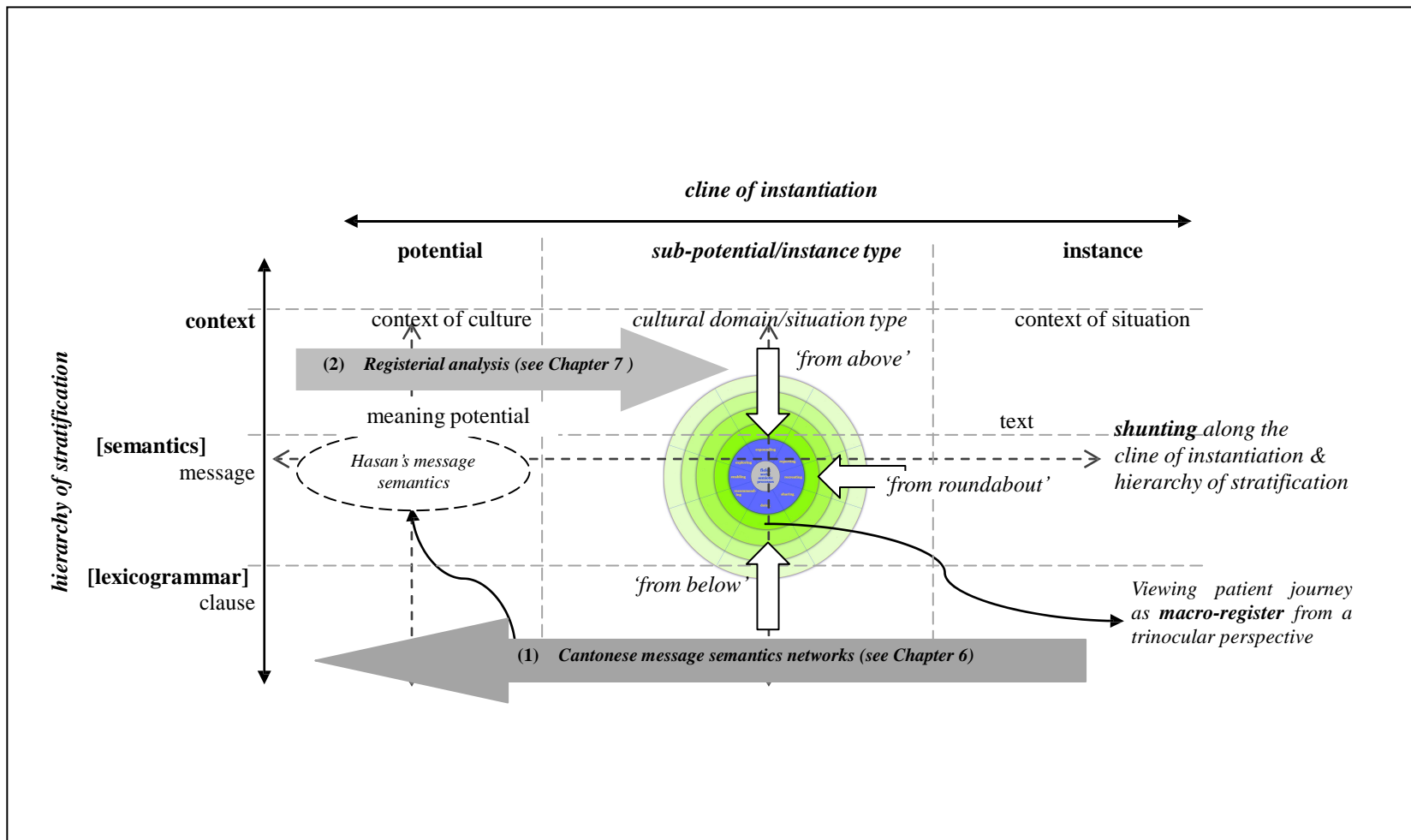


Figure 5.7 The textual analysis of the two phases of this study

5.6 Chapter Summary

This chapter has detailed the project background, research data collection, data processing as well as the research questions. Building on the literature review in Chapter 2 to Chapter 4, the study is divided into three inter-related research phases, each of which addresses the research questions through textual analysis. In particular, the proposed textual analyses are contextualised within the Hallidayan tradition, following Halliday's notion of register and Hasan's GSP and message semantic analysis. A holistic view of these analyses thus enables us to understand not only the semantics of Cantonese, but also the semantics of discursive practices in ED context.

Chapter 6

MAPPING OUT CANTONESE MEANINGS THROUGH SEMANTIC NETWORKS

6.1 Introduction

Chapter 6 aims to develop a general theoretical framework for the semantic analysis of Cantonese, which serves as the basis for the subsequent analysis of doctor-patient communication. Following Hasan and her colleagues, the framework proposed here is rooted in Hasan's conception of message semantics, concerning particularly with the meaning potentials of in the system of Cantonese. Given that the focus lies in message semantics, Section 6.2 begins by theorising the linguistic identity of the Cantonese message - the smallest meaningful semantic unit in the system of Cantonese. Having defined its inherited conceptualisations, it then moves to the modeling of messages in the representation of semantic networks, surveying the Cantonese semantic attributes pertaining to the logical (Section 6.3.2 and 6.3.4), textual (Section 6.3.3) and interpersonal metafunctions (Section 6.3.5). This chapter ends with a discussion of the semantic values of these options, illustrating how they could inform the doctor-patient communication research.

6.2 Theorising Cantonese semantic unit - message

As briefly discussed in Chapter 4, a notable advancement that Hasan has made is her theorisation the descriptum of semantic. For Hasan, the smallest meaningful unit to be focused in her semantic description is *message* - a 'theoretical motivated category' in the semantic

stratum (Hasan 2014, p. 14). In other words, it is not other units in the semantic rank scale which could permit entry to her networks; it is only *message* that can be further described and analysed exhaustively. In Hasan's view, message is the smallest meaningful unit which is capable of realising an element in the structures of texts (Hasan, 1983). Being a semantic category, message is of Janus-like. In English, it is realised in the lexicogrammatical stratum by a non-projecting clause and by the same token it realises certain features of the context of situation.

If Hasan's theoretical conceptions of semantics hold true, it appears necessary to theorise the descriptum in Cantonese semantics prior to extending or describing the Cantonese networks. Following Hasan's proposition, I define the unit of Cantonese semantic network as *message* - the smallest meaningful unit in Cantonese semantic rank scale which is capable of realising an element of the structure of text. Like English, *message* in Cantonese is the point of origin of Cantonese semantic networks – it is essentially the 'ultimate descriptum' of message semantic networks (Hasan, 2014b, p. 10). If my definition of Cantonese message is valid, the next step is to investigate how message is identified and categorised into more delicate options.

6.3 Cantonese semantic networks: an initial attempt

As reminded by Hasan and Williams (personal communication), a semantic network description in Cantonese is a huge linguistic enterprise – not only does it require a description of systemic options in various meaning systems, but also the lexicogrammatical realisation statements and selection expressions. It is thus difficult, if not, possible to represent the Cantonese semantic potential in a small scale study. As a result, in this initial attempt, the

discussions of semantic choices presented below are highly selective, and are organised in a number of fragments; each of which serve as the basis of meaning description in the subsequent chapter. The fragments of Cantonese semantic networks to be explored are as follows:

PROGRESSIVENESS: progressive message vs. punctuative message (Fragment A)

AMPLIFICATION: PREFACING of messages (Fragment B)

CONTINUATION: selected choices of **TURN-TAKING** and **TOPIC** (Fragment C)

AMPLIFICATION: SUPPLEMENTATION of messages (Fragment D)

ROLE ALLOCATION: selected choices of **QUESTION** (Fragment E)

ROLE ALLOCATION: selected choices of **STATEMENT** (Fragment F)

ROLE ALLOCATION: selected choices of **ATTITUDINAL ASSESSMENT** (Fragment G)

It should be emphasised that the analytical framework proposed here is only an ‘initial mapping’, and is developed from one single register *viz.* doctor-patient communication. Accepting that the work is still in the nascent stage, reference has also been made to some well-known Cantonese descriptive grammars so as to explicate the semantic features entailed in the Cantonese system (Luke, 1990; Wu, 1996; Leung, 2005; Matthews and Yip, 2011; Tang, 2015) . In other words, the descriptive work here involves ‘shunting’, or more precisely, shifting the perspectives along the cline of instantiation and between system and text. Important in it is that it offers us an ‘abductive’ view to Cantonese semantics – not only enabling us to ‘validate against the findings of textual analyses’, but also allowing us to ‘match up the description of the system’ (O’Donnell, 2009, p. 231).

Following Cloran (1994) and Williams (1995), this current study will first present an informal discursive account of some meaning distinctions in Cantonese. The method of presentation is summarised as follows:

- i. Given that semantic system networks involve complex relations and the expositions of the systems are complicated (Eggins, 1990, p. 174), fragments of semantic networks will be presented first in the following sections. For convenience, the symbol ‘ ... ’ indicates that at that specific point, the network permits entry to further delicate system but is not yet discussed at that point. A full network will be presented in Appendix III.
- ii. Having presented the fragments of semantic networks, a detail description and discussion of semantic options will be provided. While the present work concerns the Cantonese semantic features, Hasan’s English discussions are referred whenever necessary, and in some occasions, her terminologies are re-used. However, it should be added immediately that the re-use of her terminologies in the following discussions are only for the sake of illustration, and are only interpreted in a Cantonese sense.
- iii. In this study, semantic options are exemplified with dialogic fragments. The semantic options and their relevant examples thus serve as the semantic phenomena that will be accounted for quantitatively in Chapter 9. Recognising that the research data collected in this study is incapable to represent the full

semantic potential, constructed examples are offered, based on the existing descriptions proposed in the Cantonese literature. These examples are marked with the symbol ‘ * ’.

- iv. Whenever necessary, some stretches of discourse will be used as examples for more than once so as to illustrate how various strands of meaning analysis can be applied in one single message. Having illustrated the semantic options, each semantic option entails lexicogrammatical descriptions, indicating how the options are realised⁷³.
- v. Presentation of systemic options deserves to be noted. Here, two different forms of presentation are adopted when referring to the systemic options in the semantic and lexicogrammatical strata. Systemic options which are bold and non-italic refer to options in the semantic level (i.e. [**progressive**]), whereas those non-bold and italics are lexicogrammatical ones (i.e. [*major*]). These presentational differences are important in SFL for it keeps the descriptions of options distinct.
- vi. In addition to the presentational differences in systemic options, the use of punctuation in selection expression is also significant. Two punctuations are used in selection expression: a colon ‘ : ’ refers that the following feature is selected

⁷³ Given the orientation towards semantics in this study, focus will be paid on the illustrations of the Cantonese meaning options; and the detailed feature of each Cantonese lexicogrammatical category will not be rehearsed but is simply assumed that they are well-founded in the literature (see Tam, 2004 for a functional analysis of Cantonese clausal lexicogrammar).

from a dependent systems, whereas a semi-colon ‘ ; ’ indicates that the subsequent feature is selected from a different systems.

6.3.1 Systems of PROGRESSIVENESS

The first system under focused in Cantonese semantic network is the system of PROGRESSIVENESS, which concerns message productivity in the discourse. Message, at this most primary level of delicacy, represents a choice between **[progressive]** and **[punctuative]**. Figure 6.1 illustrates the systems of progressiveness in Cantonese.

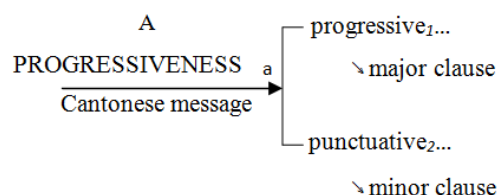


Figure 6.1 The system of Cantonese PROGRESSIVENESS

The basic distinction between these two semantic features lies in their productivity in discourse, that is, whether the message could contribute to the discourse development. From a discourse point of view, a **[progressive]** message is productive – it enjoys the potentiality to participate in the performances of every kind of social practices (Hasan, 2013, p. 284). In other words, it is the feature **[progressive]** which entails an exchange of proposition or proposals in discourse. Whereas the feature **[progressive]** is essential for continued interaction, the feature **[punctuative]** is crucial to ‘management of ongoing interaction’ (Hasan, 2013, p. 284). For Hasan, the management of interaction is interpreted in two functional senses, namely ‘locutionary guidance’ or ‘expressive guidance’ (Hasan, 1996b, p. 118). Punctuative messages

functioning as locutionary guidance serve to reveal the textual orientation of interaction. That is, it guides the flow of discourse by punctuating it into stages (cf. Hasan, 1996b; Lenvinson, 1983; Ventola, 1979). By contrast, punctuative messages functioning as expressive guidance orient to the interpersonal metafunction, signalling the affect of the speakers towards the listeners. In other words, they are concerned with the speech role allocation management and the expression of emotions such as surprise, joy or disgust (Hasan, 1996b, p. 119).

The identification of **[progressive]** and **[punctuative]** messages resides in the co-textual and contextual information. To illustrate, let me turn to Example 6.1, an excerpt of doctor-patient consultation in emergency department where the patient Crystal first encounter her panel doctor.

Example 6.1 Crystal – Doctor dyad

Turn S Msg ID Messages

154	D:	1	Crystal Crystal PN 'Crystal'				
155	P:	2	<i>hai6</i> yes 'Ye--ye--ye--yes.'	<i>hai6</i> yes	<i>hai6</i> yes	<i>hai6</i> yes	
156	D:	3	<i>nei5hou2</i> hello 'Hello'				
	D:	4	<i>jau5</i> have Predictor 'Do you have any drug allergies?'	<i>mou3</i> NEG-have	<i>joek6mat6man5gam2</i> drug allergy Complement	<i>aa3?</i> PRT Negotiator	
157	P:	5	<i>e6...</i> Ah 'Ah...yeah,'	<i>jau5</i> have Predicator	<i>aa3,</i> PRT Negotiator		

- P: 6 *jau5* *zek3* *tau4wan4* *go2di1*
have Measurer dizzy that type
Predicator Complement
‘there’s one type for dizziness, that type’
- 158 D: 7 *dim2* *man5gam2* *gaa3?*
How allergic PRT
Adjunct Predicator Negotiator
‘How allergic is it?’
- 159 P: 8 *e6...* *ngo5* *sik6* *zo2* *keoi5* *ne1,*
ah 1SG eat verbal-suffix it PRT
 Subject Predicator Complement
‘Ah...I take this’
- P: 9 *wui2,* *e6,* *go3* *zeoi2* *me2* *gaa3.*
will ah Measurer mouth twist PRT
Modal adjunct Subject Predicator Negotiator
‘my mouth would, ah, twist to one side.’
- P: 10 *e6...* *ni1* *zek3.*
Ah this Measure
 Complement
‘Ah, this one.’
- 160 D: 11 *zeoi2* *me2?*
Mouth twist
Subject Predicator
‘Your mouth twists?’
- D: 12 *me2* *maai4* *jat1* *bin6* *aa4?*
Twist verbal-suffix PRT
Predicator Negotiator
‘Twists to one side, doesn’t it?’
- 161 P: 13 *hai6* *aa3* *hai6* *aa3!*
Yes PRT yes PRT
‘Right–Right’
- 162 D: 14 *o2* *o2* *o2.*
Uh uh uh
‘Uh–uh–uh.’
- D: 15 *hou2* *laa1!*
OK PRT
‘Ok!’
- D: 16 *gin3* *me1* *si6* *aa3?*
see what matter PRT?
Predicator Wh/Complement Negotiator
‘What’s the matter?’

To initiate the consultation, doctor strategically starts with the name of the patient, as in message 1 e.g. ‘Crystal’. While person’s name, in Hasan’s work, is typically regarded as **[punctuative]**, it, as I argue, can be interpreted as both **[progressive]** and **[punctuative]** in medical context.

Semantically, message 1 is **[progressive]** in the sense it aims to check the patient identity - one of the medical protocols in healthcare system so as to avoid medical blunder. In other words, the message is a manifestation of the ‘major speech function’ of question, functioning to demand information from addressee (Matthiessen *et al.*, 2010, p. 203). Lexicogrammatically, it is an elliptical polar interrogative in the Cantonese system. Alternatively, message 1 can be deemed as **[punctuative]** for its primary semantic function is to address the patient. Viewed in this sense, it functions merely as a ‘minor speech function’ (Matthiessen *et al.*, 2010, p. 140). More specifically, it, rather than moving the discourse forward, serves more or less as a greeting – a linguistic strategy in building rapport in medical context.

Having checked the patient identity, the doctor does not go straight to the history-taking phase but starts with another message as in message 3 ‘*nei5hou2*’ (literally as ‘you + be fine’). Compared with message 1, message 3 is typically **[punctuative]** in the sense that it mostly functions as a greeting, rather than checking if Crystal is in good condition. As seen in the subsequent message, the doctor does not pass the turn to Crystal but immediately adds another message asking if Crystal has drug allergy.

Followed by these messages is a series of **[progressive]** messages forming question-answer

sequences. Here, doctor and patient co-construct the consultation by ‘furthering’ the discourse forward, where doctor asks questions (e.g. message 4, 7, 11, 12) and patient gives answers (e.g. message 5, 6, 8, 9, 13). As the discourse unfolds, doctor replies with a **[punctuative]** message right after patient’s reply, as in message 14 ‘*oh-oh-oh*’ (Uh-uh-uh), signaling doctor is attentive to the patient talk. Message 15 ‘*hou2laa1!*’ (OK!), by contrast, selects the feature **[punctuative]**, where the effect is to punctuate the flow of discourse. Here, the doctor signals that the existing topic about *drug allergy* has come to an end and is about to start a new one, as in message 16.

As shown in Example 6.1, Cantonese messages could function either moving the discourse forward or serving as discourse management devices – the former is termed as **[progressive]** and the latter is known as **[punctuative]**. Lexicogrammatically, the feature **[progressive]** is typically realised by major clause, whereas the feature **[punctuative]** is by minor clause. The correlation between the system of PROGRESSIVENESS and clause class is perhaps not surprising because it is only major clauses which can make a mood selection, thereby enjoying the potentiality to be ‘major speech functions’ and moving the discourse forward (Matthiessen *et al.*, 2010, p. 203, see also Matthiessen, 1995, p. 77). Minor clauses, by contrast, serve only ‘minor speech functions’, thus serving to opening up and closing down dialogues (Matthiessen *et al.*, 2010).

Considering the **[progressive]** and **[punctuative]** messages from below, these message entails a specific lexicogrammatical constraints. Table 6.1 summarises the semantic features of messages and their lexicogrammatical realisation in MOOD in Example 6.1.

Table 6.1 Sample analysis of the semantic and grammatical features in Example 6.1

Turn	S	Msg ID	Semantic features	Cantonese MOOD type
154	D	1	[progressive]	[major: indicative: interrogative: polar: unbiased]
155	P	2	[punctuative]	[minor]
156	D	3	[punctuative]	[minor]
		4	[progressive]	[major: indicative: interrogative: polar: unbiased]
157	P	5	[progressive]	[major: indicative: declarative]
		6	[progressive]	[major: indicative: declarative]
158	D	7	[progressive]	[major: indicative: elemental]
159	P	8	[progressive]	[major: indicative: declarative]
		9	[progressive]	[major: indicative: declarative]
		10	[progressive]	[major: indicative: declarative]
160	D	11	[progressive]	[major: indicative: interrogative: polar: biased]
		12	[progressive]	[major: indicative: interrogative: polar: biased]
161	P	13	[progressive]	[major: indicative: declarative]
162	D	14	[punctuative]	[minor]
		15	[punctuative]	[minor]
		16	[progressive]	[major: indicative: interrogative: elemental]

As noted by Hasan, these specific lexicogrammatical constraints are known as default lexicogrammatical realisations. In Cantonese, the feature **[progressive]** is realised by a major clause i.e. a clause preselecting verbal group, adjectival group and nominal group as Predicator. In contrast, the feature **[punctuative]** is realised by a minor clause so that it does not form structural paradigms (Hasan, 2013, p. 284). Typical examples include ‘dak1’ (‘*Okay*’), ‘hou2’ (‘*Good*’), ‘mou4 man6 tai4’ (literally ‘*No problem*’). Table 6.2 summarises the lexicogrammatical realisations of Cantonese **[progressive]** and **[punctuative]**.

Table 6.2 Lexicogrammatical realisations of [progressive] and [punctuative]

SEMANTIC OPTION	CANTONESE LEXICOGRAMMATICAL REALISATIONS
[progressive]	1) preselect option [<i>major</i>] i.e. ranking (non-embedded) and non-projecting clause ⁷⁴ 2) insert element Predictor; 3) preselect (an instance of) verbal group, adjective group and nominal group and as Predictor.
[punctuative]	preselect option [<i>minor</i>];

Like English, the features **[progressive]** and **[punctuative]** in Cantonese permit entry to its respective sub-system subsequently – the former is described under four sets of simultaneous metafunctionally regulated systems, whereas the latter enters the systems of punctuative messages (see Figure 6.2).

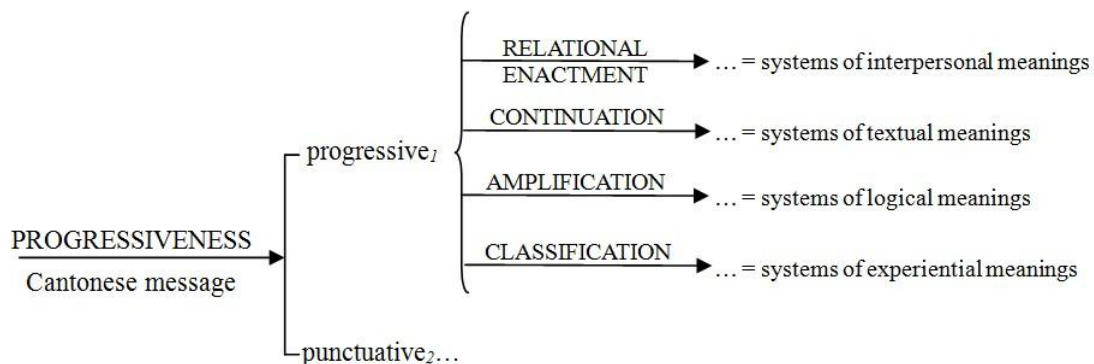


Figure 6.2 The overall organisation of Cantonese semantic networks

6.3.2 Systems of AMPLIFICATION I: PREFACING in Cantonese

Prior to the discussion of PREFACING of messages in Cantonese, it appears necessary to introduce Hasan's conception of PREFACING. By prefacing, Hasan regards it as a semantic system which is derived from logical metafunction. For Hasan, PREFACING is a semantic

⁷⁴ As illustrated in the subsequent discussion, projecting clause and its variants are the lexicogrammatical realisation of the semantic feature **[prefatory]** in Cantonese message semantics. See Section 6.3.2. for details.

system focusing on the construal of message's 'point of view', that is, whether someone's viewpoint or the source of information is made as focus point, and if it is so, in what ways is it made explicitly (see Hasan, 1983, Cloran, 1994). There are two primary semantic features within this system, namely **[prefaced]** or **[non-prefaced]**. The feature **[prefaced]** suggests that the message is a meta-representation - the 'point of view' of a message is 'packed' as a prefacing element in the message, introducing a saying (i.e. as a report or quote) or an idea (i.e. as a percept or a concept) (Hasan, 2009c [1992], p. 296). In English message semantics, the feature **[prefaced]** is realised lexicogrammatically as a projecting clause. The feature **[non-prefaced]**, by contrast, denotes that the message is a bare assertion, and is realised lexicogrammatically as a clause simplex (see also Williams, 1995).

In today's view, Hasan's notion of PREFACING partially shades into the notion of EVIDENTIALITY. Traditionally, evidentiality indicates the propositional evidence, concerning the 'source of knowledge' as well as the 'attitude towards knowledge' that the assertion rests in (Chaef, 1976, p. 262, see also Anderson, 1986, Willet 1988, and many others). Viewed in this sense, Hasan's notion of PREFACING in her English message semantic networks can be regarded as a restrictive view of EVIDENTIALITY, concerning only the manifestation of evidentiality through non-grammatical marker (i.e. logical relation).

If the above view true, it follows that PREFACING is also an important semantic resource in Cantonese. A simplified Cantonese semantic network of PREFACING is presented in Figure 6.3.

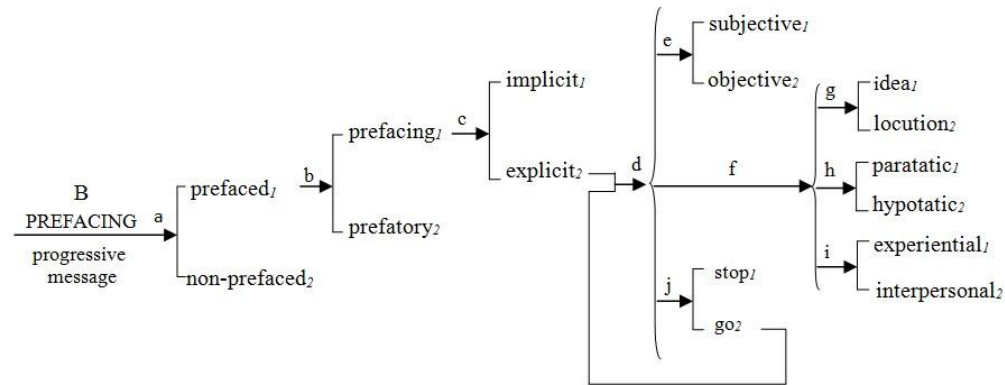


Figure 6.3 A simplified semantic network of PREFACING in Cantonese (Fragment B)

As observed in Figure 6.3, the semantic network of PREFACING in Cantonese is a highly simplified, and one could develop more delicate semantic options. Simplified as it is, it is believed a network like this is sufficient to illustrate the interactional feature in doctor-patient communication. In the following sections, I will exemplify each semantic option with examples.

6.3.2.1 Semantic options: [prefaced] vs. [non-prefaced]

As illustrated in Figure 6.3, the system of PREFACING in Cantonese, at the least delicacy, permits an entry to two contrastive options, namely **[prefaced]** and **[non-prefaced]** in system a. Semantically speaking, Cantonese messages can be categorised as either **[prefaced]** or **[non-prefaced]**. As the name suggests, the feature **[non-prefaced]** indicates that the message is construed as a bare message with no recognition of individual viewpoint or source of information. In this sense, a message selecting the feature **[non-prefaced]** is construed as something neutral, if not, factual. The feature **[prefaced]**, by contrast, suggests that the viewpoint or the information source of the rest of message is maintained. A prefaced message

thus suggests a sense of semantic extension – it orients the message focus from the bare assertion towards ‘other’s point of view, their knowledge, memory, opinion etc’ (Hasan, 2009, p. 392). Consider the following example:

Example 6.2 John – Doctor dyad

Turn S Msg ID Messages

137	D:	7	<i>wai3</i> hey ‘Hey’					
	D:	8	<i>nei5</i> 2SG Subject ‘Where is your discomfort?’	<i>bin1 dou6</i> where Adjunct	<i>m4 syu1 fuk6</i> unwell Predicator	<i>aa3 ?</i> PRT Negotiator		
138	P:	9	<i>ngo5</i> 1SG Subject ‘I throw up all the time’	<i>sing4 jat6</i> always Adjunct	<i>au2 vomit</i> Predicator			
139	D:	10	<i>sing4 jat6</i> always Adjunct ‘Throw up all the time?’	<i>au2 vomit</i> Predicator	<i>aa3 ?</i> PRT Negotiator			
140	P:	11	<i>hai6</i> yes Predicator ‘Yes’	<i>aa3</i> PRT Negotiator				
141	D:	12	<i>gam2</i> so Subject ‘Didn’t you say that your chest feels queasy?’	<i>(nei2)</i> 2-SG Subject	<i>jau6</i> also Predicator	<i>waa6</i> say Subject	<i>[[sam1 hau2 m4 syu1 fuk6]]</i> chest unwell Predicator	<i>ge2 ?</i> PRT Negotiator
142	P:	13	<i>sam1 hau2</i> chest Subject ‘Just my chest feels a bit tight.’	<i>jau5</i> have Predicator	<i>di1</i> a bit Complement	<i>ai3 zyu6</i> tight	<i>ze1</i> PRT Negotiator	
143	D:	14	<i>o2</i> Ah ‘Ah’					
		15	<i>sam1 hau2</i> chest Subject	<i>jau5</i> have Predicator	<i>di1</i> a bit Complement	<i>ai3 zyu6</i> tight		

‘Your chest feels a bit tight’

16 *haa6*
 ok
 ‘Ok’

Example 6.2 is a short exchange between John, a patient who reports that he has been suffering from chest pain for nearly ten days and his panel doctor. Like Example 6.1, the doctor initiates questions and John gives answers, forming a question-answer sequence that focuses on the medical symptoms. Within this sequence, message 8, 9, 10, 11, 12, 13 and 15 are **[progressive]** whereas message 7, 14 and 16 are **[punctuative]**.

If we view these progressive messages from the perspective of PREFACING, message 8, 9, 10, 11, 13 and 15 selects the semantic feature **[non-prefatory]**. Semantically, there are no built-in prefaced elements in these messages. More specifically, they are merely constructed as bare messages realising the speech function QUESTION (i.e. message 8, 10 and 12) and STATEMENT (i.e. message 9, 11, 13 and 15). For example, the QUERY POINT of message 8 ‘*nei5 bin1 dou6 m4 syu1 fuk6 aa3?*’ (*Where is your discomfort?*) lies in the location of pain. Here, the doctor concerns only the body part which hurts John most. In this message, the location of pain is conceptualised as fact, and what the doctor is doing verbally in this message is to figure out this objective phenomenon. In replying this question, John simply gives a **[non-prefaced]** answer, as in ‘*ngo5 sing4 jat6 au2*’ (*I throw up all the time*). Semantically, John construes his discomfort factually – it is neither a report nor a quotation but a bare assertion.

Among all messages identified in Example 6.2, it is only message 12 which selects the feature **[prefaced]**. Given that John reports chest pain as his chief medical complaint in triage session,

he, in replying doctor's question in message 8, indicates that it is his frequent vomiting which drives him to seek medical care. The disparity between the information in triage notes and John's reply thus motivates the doctor to re-confirm the chief medical complaint. As a result, John's panel doctor enacts a check question in message 12 so as to determine what the actual complaint is. Here, the prefaced element is realised lexicogrammatically through PROJECTION, suggesting that it is neither the triage nurse nor the doctor but John who construes the point of view of the message.

6.3.2.2 Semantic options: [prefacing] vs. [prefatory]

The option **[prefaced]** is itself the entry condition to system b, discriminating two more delicate options, namely **[prefatory]** and **[prefacing]**. Whereas both of them recognise the prefacing relation between prefacing element and the underlying message, they differ from each other in terms of the semantic orientations.

The option **[prefacing]** suggests that the prefacing element orients itself towards to the meaning of reporting and quoting. Semantically, the prefacing element and the underlying message are of different orders of abstraction – the prefacing element serves to highlight the underlying message as the speakers' idea and thought. Lexicogrammatically, this domain of meaning extends towards the rank of clause, so that the prefacing relation is realised within a clause nexus through PROJECTION. A message selecting **[prefacing]** is thus realised as a clause complex: the prefacing element is realised by a major process in projecting clause whereas the underlying message as projected clause.

The option **[prefatory]**, by contrast, denotes a different semantic phenomenon. Rather than orienting itself to the ideas and thoughts, the prefacing element in **[prefatory]** is packed semantically as the angle of the underlying message. The prefacing element and the underlying message are thus of the same order of abstraction, and is realised as a clause simplex in the lexicogrammatical stratum. More specifically, the prefacing relation extends towards the rank of group/phrase, and is realised by a minor process. Experientially, the minor process conflates with the Circumstance of Angle in experiential grammar. Example 8.3 presents the actual realisation of the feature **[prefatory]**.

Example 6.3 Sean - Doctor dyad

Turn S Msg ID Messages

131	D:	92	<i>zik1 hai6</i> That means	<i>nei5</i> 2SG Subject	<i>ni1 loeng5 go3 lai5 baai3</i> This two weeks Adjunct	<i>dou1 hai6</i> still (emphaiser) Adjunct	[[93]]	<i>tung3</i> hurt Predicator 'That means, these two weeks it hurts you [[93]]'
		93	<i>juk1</i> move Predicator	<i>go2 zan6</i> when 'when you move'				
		94	[[95]]	<i>zau6</i> then	<i>(nei5)</i> (2SG) (you)	<i>mou5je5</i> no problem Predicator	<i>ge3</i> PRT Negotiator	'[[95]] you are fine'
		95	<i>m4</i> not NEG	<i>juk1</i> move Predicator	<i>go2 zan6</i> when 'when you don't move'			
132	P:	96	<i>hai6</i> yes yes 'Right'	<i>laa3</i> PRT Negotiator				

133	D:	97	<i>gam2</i> so	<i>jat1 hai6</i> how about	<i>zou6</i> do	<i>siu2 siu2</i> few	<i>gim2 caa4</i> checks	<i>tai2 tai2</i> see	<i>lo1</i> PRT
					Predicator	Complement		Predicator	Negotiator
			'So how about we do some checks.'						
	D:	98	<i>ziu3 tai2</i> from my point of view	<i>zau6</i> then	<i>mou5 mat1</i> no	<i>daai6 man6 tai4</i> big issues	<i>gin3</i> see	<i>dou2</i> verbal suffix	
					NEG	Complement	Predicator		
			'From how I see, there aren't any big issues'.						

Semantically, message 98 selects the **[prefaced: prefatory]**. The prefacing element is realised experientially as *ziu3 tai2*, a grammaticalised phrase in Cantonese. Lexicogrammtically, *ziu3* is the elliptical form of Cantonese preposition *on3 ziu3* (literally as 'according to'), functioning as Circumstance of Angle in Cantonese clausal grammar. The use of *ziu3 tai2* thus indicates the source of information where the proposition rests on. Here, the source of information is made implicit. The explicit form maybe recovered as the pattern *ziu3* + source + *tai2*, such as *ziu3 ngo5 tai2* ('in my view') or *ziu3 gam2 tai2* ('according to this' where this refers to the initial examination result).

6.3.2.3 Semantic option [implicit]

The semantic feature **[prefacing]** in turn serves as an entry condition to the system c – a sub system describing the more delicate meaning options in prefacing elements. Here, two contrastive semantic options are identified viz., **[implicit]** and **[explicit]**. As the name suggested, the option **[implicit]** suggests that that the prefacing element is left implicit in the message. The omission is semantically motivated, either 'the speaker is not willing to take the responsibility of the content' (Leung, 2006, p. 136) or 'the speaker is less sure about the information' (Sybesma & Li, 2007, p. 1764). A message selecting this feature thus suggests a sense of reporting. That is, the speaker is merely reporting what someone else has said only

(Yap & Chor, 2014, p. 246). Lexicogrammatically speaking, the semantic feature **[implicit]** is realised *segmentally* by the clause final particle⁷⁵ *wo5*. By *wo5*, I refer to it only in a logical sense, denoting it as a “‘hearsay’ evidential particle which is used to indicate reported information”⁷⁶ (Matthews and Yip, 2011, p. 407; see also Leung, 2005, Cheung, 2007, Yap and Chor, 2014 and Tang, 2015). To demonstrate, let me turn to Example 6.4.

Example 6.4 Kelvin - Doctor dyad

Turn S Msg ID Messages

71	D:	134	<i>nei5</i> 2SG Subject	<i>sik6</i> take Predicator	<i>zo2</i> ASP Adjunct	<i>gei2 do1 ci3</i> how-many-times	<i>aa1</i> PRT Negotiator	<i>ni1 di1?</i> this Complement
'Hey, how many times did you take the meds?'								
72	S:	135	<i>nei4 di1</i> this Complement	<i>joek6</i> med Adjunct	<i>==zau6 mou5</i> have-not-have	<i>sik6</i> take Predicator	<i>gwo3</i> ASP	
'These meds==he didn't take them'								
73	P:	136	<i>== jat1</i> one Adjunct	<i>ci3</i> ° time	(weak voice)			
'==Once.'								
74	D:	137	<i>sik6</i> take Predicator	<i>zo2</i> ASP Negotiator	<i>laa4?</i> PRT			
'You did?'								
75	P:	138	<i>jat1</i> one Adjunct	<i>ci3</i> ° time	(weak voice)			
'Once.'								
76	S:	139	<i>keoi5</i>	<i>jau5</i>	<i>sik6</i>	<i>wo3</i>		

⁷⁵ In Cantonese literature, it is also known as ‘sentence final particle’ or ‘utterance final particle’.

⁷⁶ In Cantonese particle study, *wo5* can also be interpreted in an interpersonal sense, denoting a sense of counter-expectation (see Leung, 2008; Cheung, 2007).

3SG	have	take	PRT
Subject		Predicator	Negotiator
'I was told that he took them all right.'			

77 D: 140 *sik6* *zo2*
 take ASP
 Predicator
 'You did,'

141 *o6* *o6* *o6*,
 ah ah ah
 'ah-ah-ah,'

142 *sik6* *zo2* *jat1* *ci3* *ze1* °
 take ASP one time PRT
 Predicator Adjunct Negotiator
 'took them just once.'

In Example 6.4, message 139 selects the semantic feature **[implicit]**. Important in this selection is that Kelvin's set up a particular 'communication role' in the discourse. Semantically speaking, Kelvin's son positions himself as an 'information reporter', rather than 'answerer'. In other words, his message in this interaction is to report what he has just heard of from his father to the doctor. Linguistically, the preselection of hearsay clausal final particle *wo5* can be interpreted as a fusion of *waa6* (say) as in '*keoi5 waa6*' (he says) and the clausal final particle *o3* (Chao, 1974: 121). Message 139 can be thus paraphrased as '*I hear that my father has taken the pill, though I am not sure about it. And I am reporting the quoted content to you*'.

6.3.2.4 Semantic option **[explicit]**

Contra **[implicit]**, the option **[explicit]** suggests that the prefacing element is explicitly maintained in the message, indicating the 'speaker's ideas, opinions and locutions' (Lukin, 2013, p. 138). Lexicogrammatically, the prefacing element preselects a major process, and is realised *structurally* through a clause nexus, comprising of one or more projecting clauses and

a projected clause. To further illustrate how the semantic phenomenon embodied within the prefatory element, three simultaneous sub-systems are identified.

6.3.2.4.1 Semantic options [subjective] vs. [objective]

System e concerns the nature of the subjectivity of the prefacing element. There are two sub-options here, namely [subjective] and [objective]. A prefacing element selecting [subjective] indicates that the Subject in the element is specific, and the rest of the message is construed as a ‘personal locution’. Experientially, the Subject is realised as personal pronouns or kin term or term of endearment. By contrast, the option [objective] denotes that the Subject is indefinite referent so that the rest of the message is construed as a ‘general fact’. Experientially, the Subject in the prefacing element is realised by ‘other-say makers’ such as indefinite pronouns or lexical words conveying an indefinite reference like *jan3* ‘other person’ or *jan4dei6* ‘other people’. In some occasions, the Subject in the prefacing element is left implicit as in *teng1 waa5* (literally as *I hear someone say that...*).

Example 6.5 Sean - Doctor dyad

Turn S Msg ID Messages

104	P	46	<i>bat1</i> <i>gwo3</i> but	<i>gam1</i> <i>jat6</i> today	<i>zau6</i> then	<i>go3</i> the	<i>sam1</i> <i>tiu3</i> heart rate	<i>hou2</i> <i>ci5</i> seem	<i>m4</i> NEG	<i>hai6</i> be	<i>hou2</i> very	<i>zing3</i> <i>soeng4</i> normal
				Adjunct		Subject		Adjunct	Adjunct	Pred-	Adjunct	-icator
			‘But today, ah, my heart rate seems to be not quite normal.’									
104	P	47	<i>jan1</i> <i>wai6</i> because	<i>ngo5</i> 1SG		<i>hai2</i> <i>e6</i> <i>ni1</i> <i>dou6</i> here		<i>fuk1</i> follow-		<i>hoi1</i> Verbal suffix		<i>can2</i> -up visit
				Subject	Adjunct			Predicator				
			‘Because I, ah, have been having follow-up visits here.’									
104	P	48	<i>zau6</i> (<i>hai5</i>) be			<i>sam1</i> <i>zong6</i> <i>beng6</i> heart diseases						

			Predicator	Complement				
			'It is heart diseases.'					
105	D	49	<i>keoi5</i>	<i>waab6</i>	<i>nei5</i>	<i>(yau5)</i>	<i>me1 si6</i>	<i>aa3?</i>
			3SG	say	2SG	(have)	what	PRT
			Subject	Predicator	Subject	Predicator	Complement	Negotiator
			'He says what the matter you have?'					
105	P	50	<i>e6</i>	<i>sam1 gei1 fei4 daai6</i>				
				hypertrophic cardiomyopathy				
				Complement				
			'Err, hypertrophic cardiomyopathy.'					
106	D	51	<i>sam1 gei1 fei4 daai6</i>					
				hypertrophic cardiomyopathy				
				Complement				
			'Hypertrophic cardiomyopathy.'					
106	P	52	<i>hai5</i>	<i>aa3</i>				
			yes	PRT				
			yes	Negotiator				
			'Right.'					

In Example 6.5, message 105 selects [**explicit: objective**]. The Subject of the prefaced element preselects the Cantonese third personal singular pronoun *keoi5* ('he'), referring to Sean's panel doctor in the division of cardiology.

6.3.2.5 Semantic options of PROJECTION

System f, by contrast, concerns the nature of projection in message semantics, which can be delicately categorised into three simultaneous sub-systems. As illustrated below, these three sub-systems echo the three features of PROJECTION of clause grammar respectively⁷⁷.

The first system to be focused is LEVEL OF PROJECTION (i.e. *system g*), concerning the characteristic of projection in message semantics. In a general sense, system e can be

⁷⁷ The resonance of clause grammar and message semantics is perhaps not surprising in SFL. Lexicogrammar, though unifies the lexical and grammatical domains of language, is essentially a description which 'push[es] in the direction of semantics' (Halliday, 1985a: xix).

referenced to the conception of PROJECTION in LOGICAL–SEMANTIC RELATION in the clause grammar (Halliday and Matthiessen, 2014). Through projection, the underlying message is set up as the representation of the semantic content of the prefacing element. In Cantonese, the semantic content can be either **[idea]** or **[locution]** – the former suggests that the content of a message is represented as ‘what is thought’ whereas the latter is represented as ‘what is said’ (cf. Halliday and Matthiessen, 2014, p. 509). Given the distinction of semantic contents, the lexicogrammatical realisations of these two levels of projection are also different. In Cantonese, the feature **[idea]** preselects the mental process in the projecting clause, while the feature **[locution]** preselects verbal process.

The second system that deserves to be noted is MODE OF PROJECTION (i.e. *system h*), focusing on the interdependency relations between prefacing element and the underlying message. There are two contrastive options in system g, namely **[paratatic]** and **[hypotatic]**. Like clausal grammar, the semantic option **[paratatic]** suggests that the prefacing element and the underlying message are paratactically related, and the realising clauses are of equal status. By contrast, the option **[hypotatic]** indicates that the two semantic components are organised hypotactically in a logical sense, and the entire message is realised by a hypotatic clause complex⁷⁸.

The third primary system deriving from *system f* is ORIENTATION (i.e. *system i*), reflecting the delicate meaning orientation of prefacing elements. As discussed, prefacing element is

⁷⁸ As indicated by Halliday and Webster (2014: 77), the selection of the hypotaxis and parataxis in clause complexing reflects by and large the MODE OF DISCOURSE, whether the text is oriented to spoken discourse (i.e. conversation) written discourse (i.e. novels). I believe that such a view holds in message semantics.

logically-oriented, indicating the view point of a given message. However, it should be emphasised that such an element is also oriented to both experiential and interpersonal meanings. To capture these two orientations, two semantic options are discriminated, *viz.* **[experiential]** and **[interpersonal]**. An **[experiential]** prefacing element suggests that the message viewpoint is experientially-oriented, with no recognition of any modal meanings. On the contrary, a **[interpersonal]** prefacing element is essentially interpersonally-oriented, and the meaning realised by the prefacing part of the message has undergone a semantic extension through metaphorical realisation (see Halliday and Matthiessen, 2014). In this sense, the prefacing element not only indicates the message's viewpoint, but also expresses the speaker's modal assessment of the underlying message.

Example 6.6 to 6.7 presents the instances of message selecting these meaning options.

Example 6.6 Robin - Doctor dyad

Turn S Msg ID Messages

456	D:	81	<i>wai6 hau2</i> appetite Subject	<i>dim2</i> how Predicator	<i>aa3</i> PRT Negotiator	<i>ji4 gaa1?</i> now Adjunct				
'How's your appetite?'										
457	P:	82	<i>e6</i> Er	<i>wai6 hau2</i> , appetite	<i>sik6</i> eat Predicator	<i>dak1</i> can	<i>gaa3</i> PRT Negotiator			
'Err, as for appetite, I eat a lot.'										
458	D:	83	<i>do1</i> more Predicator	<i>zo2,</i> ASP	<i>ding6</i> or	<i>caa1 m4 do1,</i> roughly the same Predicator	<i>ding6</i> or	<i>mou5</i> NEG	<i>fan1 bit6?</i> difference Predicator	
'More, or roughly the same, or no difference?'										
459	P:	84	<i>e6...</i> er	<i>jyu4 gwo2</i> if	<i>m4</i> NEG Predicator	<i>hai6</i> be	<i>e6...</i> er			

‘Ah... if not ah...’

- 460 D: 85 ==*tung4* *zi1 cin4* *bei2* *nei1...* *nei5* *gok3 dak1*
 with previous compare PRT 2-SG think
 Adjunct Predicator Negotiator Subject Predicator
 ‘Compared with before, do you think’
- 86 == *zik1 hai6* *jat1* *go3* *jyut6* *cin4*
 == that means one month before
 Predicator Complement
 ‘I mean a month ago’
- 461 P: 87 ==*tung4* *zi1 cin4* *bei2* *aa3...*
 with previous compare PRT
 Adjunct Predicator Negotiator
 ‘==Compared with before...’
- 461 P: 88 *hai6* *sik6* *siu2* *zo2* *hou2 do1* *je5* *lo1 °*
 really eat less ASP many thing PRT
 Adjunct Pred- Adjunct icator Complement Negotiator
 ‘I, indeed, eat much less’
- 462 D: 89 *caa1* *zo2*
 worse ASP
 Predicator
 ‘It gets worse?’
- 463 P: 90 *hai6* -
 yes
 yes
 ‘Yes’
- 91 *m4 hai6* *daan6 hai6* *sik6* *dak1* *gaa3 °*
 NEG-be but eat Verbal suffix PRT
 Predicator Negotiator
 ‘No, but I can eat a lot.’
- 464 D: 92 *zik1 hai6* *[[you)* *m4 hai6* *hou2* *soeng2* *sik6?]]*
 means 2-SG NEG-be very want eat
 Predicator you Adjunct Adjunct Modal Adjunct Predicator
 ‘That means you don’t feel like eating much?’
- 464 93 *daan6* *wui2-m4-* *sik6* *do1* *zo2* *je5* *aa1,*
hai6 *wui2*
 but will-NEG- eat more ASP thing PRT
 will
 Adjunct Predi- Adjunct -cator Complement Negotiator
 ‘But you’ve eaten more,’

<i>nei5</i>	<i>gok3 dak1?</i>
2-SG	think
Subject	Predicator
'do you think?'	

465	D:	94	<i>jau5</i>	<i>siu2 siu2</i>	<i>hak1 ji3</i>	<i>gaam2</i>	<i>laa1</i> °
			have	little	deliberately	loss	PRT
			Predi-		Adjunct	-cator	Negotiator
			'I'm a bit conscious of losing weight.'				

In Example 6.6, message 85 and message 93 select the meaning option [**explicit: subjective: idea: hypotatic: experiential**]. Here, the messages are explicitly prefaced through clause complex as in '*nei5 gok3 dak1*' (*you think*). The preselection of mental process '*gok3 dak1*' (*think*) in '*nei2 gok3 dak1*' (*you think...*) indicates that the semantic content of the rest of the message is an idea. The effects of these prefacing elements express speaker's subjective viewpoint, conveying his or her psychological condition – whether it is a perception, presupposition or inference. Regarding the meaning orientation, the prefacing elements are experientially-oriented, with no recognition of interpersonal judgment about the rest of the message.

Example 6.7 Ada - Doctor dyad

Turn S Msg ID Messages

125	P:	206	<i>ngo5</i>	<i>jau5</i>	<i>tung4</i>	<i>ji1 sang1</i>	<i>gong2</i>	<i>gaa3</i>
			1-SG	ASP	to	doctor	say	PRT
			Subject	Pre-		Complement	-dicator	Negotiator
			'I've told the doctor.'					
126	D:	207	<i>hai6</i>					
			yes					
			yes					
			'Yes'					
127	P:	208	<i>ji1 sang1</i>	<i>jau5</i>	<i>man6</i>	<i>ngo5</i>		
			doctor	ASP	asked	1-SG		
			Subject	Predicator		Complement		
			'The doctor asked me,'					

			<i>hai6 mai1</i> yes-NEG-yes Predicator '“Is it black?”'	<i>hak1 sik1</i> black Complement	<i>gaa3?</i> PRT Negotiator	
		209	<i>ngo5</i> 1-SG Subject 'I replied,	<i>waa6</i> say Predicator “It wasn't black.”'	<i>m4</i> NEG Adjunct	<i>hai6</i> be Predicator <i>hak1 sik1</i> ° black Complement
128	D:	210	<i>hai6</i> yes yes 'Yes'			
129	P:	211	<i>ngo5</i> 1-SG Subject I said it wasn't black.	<i>waa6</i> say Predicator	<i>m4</i> NEG Adjunct	<i>hai6</i> be Predicator <i>hak1 sik1</i> ° black Complement
		212	<i>ngo5</i> 1-SG I	<i>waa6</i> ask ask Adjunct	<i>hai6 mai6</i> yes-NEG (because) Adjunct	<i>sik6 dou3</i> eat Predicator <i>hyut3 aat3 joek6</i> blood pressure meds Complement
		213	<i>sin1</i> so	(<i>be</i>) be (Predicator)	<i>gam2joeng2</i> like that Adjunct 'which causes this case.'	
		214	<i>ngo5</i> 1-SG Subject 'I asked him.'	<i>zau6</i> then then Predicator	<i>man6</i> ask ask Complement	<i>keoi5</i> 3-SG Complement
130	D:	215	<i>jat1 bun1</i> Generally Adjunct 'Generally it isn't the case.'	<i>zau6</i> then then Adjunct	<i>m4</i> NEG Adjunct	<i>hai6</i> be Predicator <i>ge2</i> PRT Negotiator
131	P:	216	<i>haa2?</i> what? 'Huh?'			
132	D:	217	<i>jat1 bun1</i> Generally Adjunct 'Generally it isn't the case.'	<i>zau6</i> then then Adjunct	<i>m4</i> NEG Adjunct	<i>hai6</i> be Predicator <i>ge2</i> PRT Negotiator

133	P:	218	<i>keoi5</i> 3-SG Subject 'He said,	<i>waa6</i> said Predicator 'You eat more fruits.'	<i>"nei5</i> 2-SG Subject	<i>sik6</i> eat Predicator	<i>do1 di1</i> more Complement	<i>sang1 gwo2"</i> fruit
		219	<i>keoi5</i> 3-SG Subject 'He told me like that.'	<i>zau6</i> then like that	<i>gam2</i> like that	<i>giu3</i> tell Predicator	<i>ngo5</i> 1-SG Complement	
134	D:	220	<i>hai5</i> yes yes 'Yes?'	<i>aa3</i> PRT Negotiator				

In Example 6.7, message 208, 209, 211, 212, 213 and 218 are prefaced messages. The prefacing elements in these messages preselect the verbal process, which is realised by lexical verb *waa5*⁷⁹. The preselection thus suggests that the rest of these messages are locutions. Semantically, these locutions are subjective in nature, preselecting definite references as Subject. The selection expressions of these messages are summarised in Table 6.3.

Table 6.3 Cantonese semantic feature expression of PREFACING system in Example 6.7

Turn	S	Msg ID	Cantonese semantic feature expression of PREFACING system
125	P	206	[non-prefaced]
126	D	207	-
127	P	208	[prefaced: prefacing: explicit: subjective: locution: paratactic: experiential]
		209	[prefaced: prefacing: explicit: subjective: locution: paratactic: experiential]
128	D	210	-
129	P	211	[prefaced: prefacing: explicit: subjective: locution: hypotactic: experiential]
		212	[prefaced: prefacing: explicit: subjective: locution: paratactic: experiential]
		213	[prefaced: prefacing: explicit: subjective: locution: paratactic: experiential]
		214	[non-prefaced]
130	D	215	[non-prefaced]
131	P	216	-
132	D	217	[non-prefaced]
133	P	218	[prefaced: prefacing: explicit: subjective: locution: paratactic: experiential]

⁷⁹ It should be emphasized that Cantonese *waa5* can be used in two other grammatical functions, namely complementizer and quotative marker. In a systemic functional sense, neither of them are regarded as verbal process.

		219	[non-prefaced]
134	D	220	[non-prefaced]

To illustrate, let me compare and contrast the message 208 and 211. In Example 6.7, message 208 selects the feature **[explicit: subjective: locution: paratactic: experiential]**. Lexicogrammatically speaking, the entire message is realised by a single paratactic clause complex. Intonationally, there is a pause between the projecting clause and the projected clause, signaling two distinctive intonation contours. The lexicogrammatical and intonational realisations thus suggest the locution in the message is a direct quotation. Like message, 208, message 211 selects the feature **[explicit: subjective: locution: experiential]**. The only difference is that the latter selects the semantic option **[hypotatic]**. Important in this selection is that the entire message is realised lexicogrammatically by a hypotatic clause complex, and intonationally by one intonation contour i.e. falling intonation. In this sense, the locution in the message is interpreted as a report.

6.3.2.6 Recursive system *[stop]* vs. *[go]*

The final system in the system of PREFACING is a recursive system (i.e. *system j*), capturing the possibility of recursive prefacing element. A message selecting **[stop]** indicates that there is only one prefacing element. On the contrary, if a message selecting the feature **[go]**, it suggests that the underlying message re-enters to *system c*, and selects another set of semantic features embodied in the second prefatory element. The recursive prefatory elements and the underlying message thus exhibit a serial structure i.e. *prefacing element_n prefacing element_{n+1} underlying message*. In doctor-patient communication, all of the prefaced messages only entail one degree of prefacing. Example 6.8 is an invented example of a

message selecting the meaning feature [go] in the recursive system.

Example 6.8*

Turn S Msg ID Messages

D:	01	<i>nei5</i>	<i>sik6</i>	<i>zo2</i>	<i>gei2 do1 ci3</i>	<i>aa1</i>	<i>ni1 di1?</i>	
		2SG	take	ASP	how-many-times	PRT	this	
		Subject	Predicator		Adjunct	Negotiator		Complement
		'Hey, how many times did you take the meds?'						

S:	02	<i>ngo5</i>	<i>gei3 dak1</i>	<i>keoi5</i>	<i>waa5</i>	<i>sik6</i>	<i>gwo3</i>	<i>joek6</i>
		1- SG	remember	3-SG	say	eat	ASP	med
		Subject	Predicator	Subject	Predicator	Predicator		Complement
		'I remember that he had told us that he had taken the pill.'						

In this invented example, message 2 is recursively prefaced. There are two prefacing elements – the first part concerns [idea] whereas the second one [locution]. The entire selection expression of message 02 is thus as follow: **[prefaced: prefacing: explicit: subjective (1): idea (1): hypotatic (1): experiential (1); subjective (2): locution (2): hypotatic (2): experiential (2): stop]**.

Realisation statements of the semantic options of Cantonese PREFACING system are summarised in Table 6.4.

Table 6.4 Tentative lexicogrammatical realisations of meaning options of PREFACING (Fragment B)

	SEMANTIC OPTION	CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1:	[prefaced]	see b1 and b2
a2:	[non-prefaced]	outclassify b1 and b2
b1:	[prefacing]	prefacing element preselects major process
b2:	[prefatory]	prefacing element preselects minor process

c1:	[implicit]	prefacing element preselects the ‘hearsay’ clause final particle <i>wo5</i>
c2:	[explicit]	preselect projecting clause as prefacing element
e1	[subjective]	1) insert element Subject; 2) S conflates with Sayer or Senser; 3) S in projecting clause preselect (an instance of) personal pronouns or kin term or term of endearment
e2	[objective]	1) insert element Subject; 2) S conflates with Sayer or Senser; 3) Either: a) S preselects indefinite pronoun or lexical word <i>jan4dei6</i> or b) S is left implicit
g1:	[idea]	Process in the projecting clause preselects Mental
g2:	[locution]	Process in the projecting clause preselects Verbal
h1:	[paratatic]	clause complex preselects paratactic projection
h2:	[hypotatic]	clause complex preselects hypotatic projection
i1	[experiential]	projecting clause outclassifies as interpersonal grammatical metaphor
i2	[interpersonal]	projecting clause preselects as interpersonal grammatical metaphor

6.3.3 Systems of CONTINUATION I: TURN TAKING and TOPIC

In message semantics, TURN and TOPIC are systems networks concerning the textual meanings exhibited by messages. First appeared in Eggins (1990)⁸⁰, these two systems pay particular attention towards the continuity of messages in English discourse – the former focuses on the semantic phenomenon pertaining to turn-taking whereas the latter concerns topic maintenance, or more specifically, whether ‘messages are cohesively related’ (see Lukin, 2013, p. 137 see also Williams, 1995, Hasan, 2013 and Lukin, 2012 and 2013).

Like English, the system of Cantonese entails corresponding semantic networks of TURN and TOPIC. In this section, I will briefly discuss the primary options in these two systems. Figure 6.4 presents a tentative Cantonese semantic network of TURN and TOPIC.

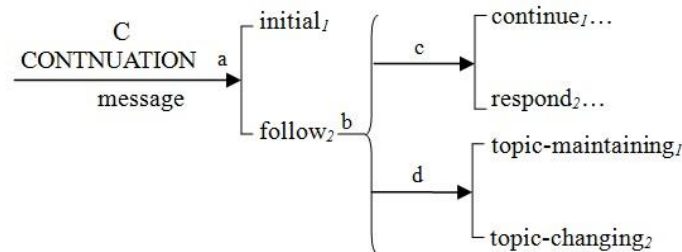


Figure 6.4 A tentative semantic network of CONTINUATION in Cantonese (Fragment C)

6.3.3.1 Semantic options: [initial] vs. [follow] and [continue] vs. [response]

As illustrated in Figure 6.4, the system of TURN (i.e. *system a*) discriminates two primary semantic options, namely **[initiate]** and **[follow]**. As their names suggest, these two meaning

⁸⁰ It should be noted that while Hasan has recognised the importance of semantic system CONTINUATION, she has not discussed the sub-systems in her published works in greater detail. By far, the most delicate description of CONTINUATION is Williams (1995), who further introduces two primary sub-systems, *viz.*, TURN and TOPIC. These two systems, as asserted by Williams, have been fully testified and are in line with Hasan’s semantic description.

options aim to reflect the relative discursive position of messages in relation to other messages (Williams, 1995, p. 184). The semantic feature **[initiate]** denotes the first non-supplementing message in a sequence of talk. Semantically, it marks the beginning of the exchanges sequence. A message selecting **[initiate]** thus indicates a role enactment – the current speaker is either exchanging the proposition or proposals in a talk. Contrary to the feature **[initiate]** is **[follow]**, which refers to those subsequent messages following the **[initial]** message. Discursively, they are the sustaining the **[initiate]** message in a stretch of talk. The feature **[follow]** subsequently serves as the entry condition of system b - a simultaneous selection of semantic choices of TURN (i.e. *system c*) and TOPIC (i.e. *system d*).

System l is the second-order description of TURN, concerning the discursive position in relation to the preceding messages. A **[follow]** message can be either **[continue]** or **[response]** – the former suggests that the speaker continues his speech role and enact messages in his linguistic turn whereas the latter recognises a shift of speaker's turn, a notion of turn taking in conversation analysis studies Sacks *et al.* (1974). In Cantonese, the feature **[initiate]** is lexicogrammatically realised by a first independent clause in a speaker's turn, whereas the feature **[follow]** is realised lexicogrammatically as either a dependent clause or independent clause.

6.3.3.2 Semantic options: *[topic-maintaining]* vs. *[topic-changing]*

A **[follow]** message simultaneously enters *system m* – a sub-system of concerning topic maintenance. Like English, the notion of 'topic' is a widely discussed in Chinese literature. Cantonese, like Mandarin Chinese, is a topic-prominent language – every Cantonese clause

contains two constituents, *viz.*, topic and comment. By ‘topic’, I refer to Chafe’s (1976, p. 50) view, defining it as the constituent which ‘sets a spatial, temporal or individual framework within which the main predication holds’. Important in it is that though Cantonese topic is interpreted in the clausal level, it is, inherently semantic - the two constituents form a semantic dependency known as topic-comment relation. More specifically, topic comes before comment and occurs in the initial position of a clause/sentence (Li and Thompson, 1981).

In this current study, topic is re-interpreted in the message level – it is a semantic entity which is derived from textual metafunction, concerning the continuity of message in Cantonese discourse. Semantically, message continuity, in the most general sense, can be either **[topic-maintaining]** or **[topic-changing]**. As their names suggest, the feature **[topic-maintaining]** denotes a sense of message continuity in discourse. A message selecting **[topic-maintaining]** suggests that the message-level topics remain the ‘same’ in discourse – the topic of the current message is in line with the preceding one, thereby forming a continuous topic chain. In a systemic functional sense, message-level topics in the topic chain are realised lexicogrammatically as either topical theme or emphatic theme⁸¹ in textual metafunction; each of which bears semantic and lexicogrammatical relevance. Conversely, the feature **[topic-changing]** refers to a discontinuation of topic. Semantically, it marks the beginning of a new topic in discourse - the speaker does not take up the existing topic but diverts it to a new topic in the subsequent messages. The thematic choice in a **[topic-changing]** message thus bears no semantic and lexicogrammatical relevance to the previous one. The explication of the message-level topics not only enables us to recognise the how Cantonese speakers frame the

⁸¹ By ‘emphatic theme’, I refer to the left-most constituent in a Cantonese clause resulted from the process of topicalisation in the system of Cantonese.

textual prominence in discourse, but also allows us to mark the beginning and the end of a discourse textually. To illustrate the semantic options pertaining to TURN TAKING and TOPIC, let me turn to Example 6.9, and extended dialogue of Example 6.1.

Example 6.5 Crystal – Doctor dyad (cont’ of Example 6.1)

Turn S Msg ID Messages

154	D:	1	Crystal Crystal PN ‘Crystal’				
155	P:	2	<i>hai6</i> yes ‘Ye–ye–ye–yes.’	<i>hai6</i> yes	<i>hai6</i> yes	<i>hai6</i> yes	
156	D:	3	<i>nei5hou2</i> hello ‘Hello’				
		4	<i>jau5</i> have	<i>mou3</i> NEG-have Predictor	<i>joek6mat6man5gam2</i> drug allergy Complement	<i>aa3?</i> PRT Negotiator	
			‘Do you have any drug allergies?’				
157	P:	5	<i>e6...</i> Ah	<i>jau5</i> have Predictor	<i>aa3,</i> PRT Negotiator		
			‘Ah...yeah,’				
		6	<i>jau5</i> have Predictor	<i>zek3</i> Measurer Complement	<i>tau4wan4</i> dizzy	<i>go2di1</i> that type	
			‘there’s one type for dizziness, that type’				
158	D:	7	<i>dim2</i> How Adjunct	<i>man5gam2</i> allergic Predictor	<i>gaa3?</i> PRT Negotiator		
			‘How allergic is it?’				
159	P:	8	<i>e6...</i> ah	<i>ngo5</i> 1SG Subject	<i>sik6</i> eat	<i>zo2</i> verbal-suffix Predictor	<i>keoi5</i> it Complement
			‘Ah...I take this’				
	P:	9	<i>wui2,</i> will	<i>e6,</i> ah	<i>go3</i> Measurer	<i>zeoi2</i> mouth	<i>me2</i> twist
						<i>gaa3.</i> PRT	

									Subject	Predicator	Negotiator
									'my mouth would, ah, twist to one side.'		
		10	<i>e6...</i> Ah	<i>ni1</i> this	<i>zek3.</i> Measure Complement						
					'Ah, this one.'						
160	D:	11	<i>zeoi2</i> Mouth Subject	<i>me2?</i> twist Predicator							
			'Your mouth twists?'								
		12	<i>me2</i> Twist Predicator	<i>maai4</i> verbal-suffix	<i>jat1</i>	<i>bin6</i>	<i>aa4?</i> PRT? Negotiator				
			'Twists to one side, doesn't it?'								
161	P:	13	<i>hai6</i> Yes	<i>aa3</i> PRT	<i>hai6</i> yes	<i>aa3!</i> PRT					
			'Right-Right'								
162	D:	14	<i>o2</i> Uh	<i>o2</i> uh	<i>o2.</i> uh						
			'Uh-uh-uh.'								
	D:	15	<i>hou2</i> OK	<i>laa1!</i> PRT							
			'Ok!'								
163	D:	16	<i>gin3</i> see Predicator	<i>me1</i> what Wh/Complement	<i>si6</i> matter	<i>aa3?</i> PRT? Negotiator					
			'What's the matter?'								
164	P:	17	<i>e6...</i> ah	<i>ngo5</i> I Subject	<i>gam1</i> this morning Adjunct	<i>ciu4</i> seven o'clock Adjunct	<i>cat1</i> wake up Predicator	<i>dim2 zung1</i> like this			<i>ne1</i> PRT
			'Ah...when I got up at seven o'clock this morning.'								
		18	<i>zau6</i> then	<i>tau4</i> dizzy Predicator	<i>wan4</i> PRT	<i>laa3,</i> Negotiator					
			'I was dizzy'								
		19	<i>go3</i> CL Subject	<i>jan4</i> person	<i>ne1</i> PRT	<i>dam4dam4zyun2</i> spinning Predicator	<i>gam2joeng2</i> like this				
			'I was spinning and such.'								
165	D:	20	<i>m6,</i> Mm								

		21	<i>hou2</i> good Predicator 'Okay.'	<i>aa3</i> PRT Negotiator				
		22	<i>cat1 dim2 zung1</i> seven o'clock Adjunct 'At seven o'clock you	<i>hei2,</i> start Predicator	<i>==hai6 mai2</i> ==right-not-right TAG	<i>aa3?</i> PRT Negotiator		
166	P	23	<i>==hei2 — hei2</i> wake up Predicator '==Out—out of bed.'	<i>cong4</i> bed				
167	D:	24	<i>jau5 mou5</i> have-NEG-have Predicator '==Did you pass out and such?'	<i>bat1 sing2 jan4 si6</i> pass out Predicator	<i>go2 di1</i> those	<i>aa3?</i> PRT Negotiator		
168	P:	25	<i>zik1 hai6</i> I mean Adjunct 'I mean, still awake,'	<i>dou1</i> still Adjunct	<i>cing1 sing2 ,</i> awake Predicator			
		26	<i>daan6 hai6</i> but Predicator 'but when I walked,'	<i>hang4</i> walk	<i>hei2</i> Predicator	<i>soeng6</i> verbal-suffix	<i>lai4</i>	<i>ne1</i> PRT
		27	<i>zau6</i> then Predicator 'I dipped and dipped.'	<i>zong1 haa2</i> dipped Predicator	<i>zong1 haa2 °</i> dipped			
169	D	28	<i>jau5 mou5</i> Have-NEG-have Predicator 'So, did you vomit or something?'	<i>au2</i> Vomit Predicator	<i>dou3</i> verbal suffix	<i>gam2 joeng2</i> so	<i>aa1?</i> PRT Negotiator	
170		29	<i>e6</i> Er Predicator 'Not yet.'	<i>mei6 jau5</i> NEG-have: perfective Predicator	<i>au2</i> vomit			

If we analyse Example 6.5 in terms of TURN TAKING and TOPIC system, it is obvious that the extract is consisted of five exchanges; each of which concerns a particular topic. In a macro-sense, all these five exchanges are inter-related: they are hold together to constitute the phase of history-taking session – one of the obligatory stages in the emergency patient journey (See Chapter 7 for details). In a micro-sense, these fives exchanges are distinctive – they are all concerned with a specific ‘topic’, whether it is patient identity, drug allergy, dizziness, unconsciousness or vomiting etc.

Take exchange 2 as an example. Here, message 4 selects the semantic attributes [**follow: continue: topic-shifting**]. Semantically, the selection marks the doctor’s attempt in continuing the discourse of exchange 1 by shifting the topic from *patient identity* to *drug allergy*. The subsequent messages select [**response**] and [**continue**], denoting that doctor and Crystal take turn in the negotiation. For instance, message 5 selects [**follow: response**] in the sense that the Crystal followed the discourse development by responding to doctor’s question ‘*jau5 mou3joek6mat6man5gam2aa3?*’ (*‘Do you have drug allergy?’*). Rather than passing the floor to the doctor, Crystal continued to develop her response by specifying the type of drug allergy she had, as in message 6. Semantically, message 6 selects [**follow: continue**]. Having recognised that Crystal had drug allergy, the doctor made a respond regarding message 6. Message 7 thus interpreted as [**follow: respond**]. The negotiation of information continued till message 14 and 15 where the doctor selected the option [**punctuative**]. The semantic selections of options pertaining to TURN TAKING and TOPIC thus constitute the internal semantic structure of each exchange.

GSP	Turn	S	Msg ID	Cantonese semantic feature expression of TURN TAKING and TOPIC system	Exchange	Topic development
History-taking	154	D	1	[initiate]	E1	<div><div>↓</div><div>Patient identity</div><div>↓</div><div>Drug allergy</div><div>↓</div><div>Dizziness</div><div>↓</div><div>Unconsciousness</div><div>↓</div><div>Vomiting</div></div>
	155	P	2	[follow: response; topic-maintaining]		
	156	D	3	-		
		D	4	[follow: continue: topic-shifting]		
	157	P	5	[follow: response; topic-maintaining]	E2	
		P	6	[follow: continue; topic-maintaining]		
	158	D	7	[follow: response; topic-maintaining]		
	159	P	8	[follow: continue; topic-maintaining]		
		P	9	[follow: response; topic-maintaining]		
		P	10	[follow: continue; topic-maintaining]		
	160	D	11	[follow: response; topic-maintaining]		
		D	12	[follow: continue; topic-maintaining]		
	161	P	13	[follow: response; topic-maintaining]	E3	
	162	D	14	-		
		D	15	-		
	163	D	16	[follow: continue: topic-shifting]		
	164	P	17	[follow: continue; topic-maintaining]		
		P	18	[follow: response; topic-maintaining]		
		P	19	[follow: continue; topic-maintaining]		
	165	D	20	-		
		D	21	-		
		D	22	[follow: response; topic-maintaining]	E4	
	166	P	23	[follow: response; topic-maintaining]		
	167	D	24	[follow: response: topic-shifting]		
	168	P	25	[follow: response; topic-maintaining]		
		P	26	[follow: continue; topic-maintaining]	E5	
		P	27	[follow: continue; topic-maintaining]		
	169	D	28	[follow: response: topic-shifting]		
	170	P	29	[follow: response; topic-maintaining]		

Figure 6.5 Cantonese semantic feature expression of TURN TAKING and TOPIC system in Example 6.9

6.3.4 Systems of AMPLIFICATION II: SUPPLEMATION

Another semantic system that derives from the logical component of Cantonese messages semantics is SUPPLEMENTATION (see Hasan, 1983, Cloran, 1994, Williams, 1995 and many others). In Hasan's message semantic network, messages are not separated semantic building blocks of discourse; they are essentially related to one another through message relations. Important in these message relations is that they enable language users to combine meanings in a 'tighter integration in meaning' in both internal and external manners (Halliday and Matthiessen, 2014, p. 430). Following Halliday and Matthiessen, it is argued that message relations and semantic integration are important aspects in Cantonese message semantics

The idea of message relations can be traced back to Hasan's (1983) conception of the semantic option **[elaborated]**, but with modification. For Hasan, **[elaborated]** is a semantic feature indicating that a message is logically related to other messages through overt or covert indications of parataxis and hypotaxis. Important in this option is that it is a 'gross category' so that the entire logical relations among messages are all collapsed into it (Hasan, 2009c [1992], p. 295, see also Hasan, 1983). While Hasan views message relations as a gross term, this current study, following Williams (1995), conceptualises the logical relations in a categorical manner so that the meaning relations can be further categorised based on its semantic natures (see Section 6.3.4.3 for a detailed discussion). In so doing, the descriptions of message relations will become more systematic and delicate. Based on Williams (1995), a tentative system network of SUPPLEMENTATION is proposed so as to capture the relatedness of Cantonese messages (see Figure 6.6).

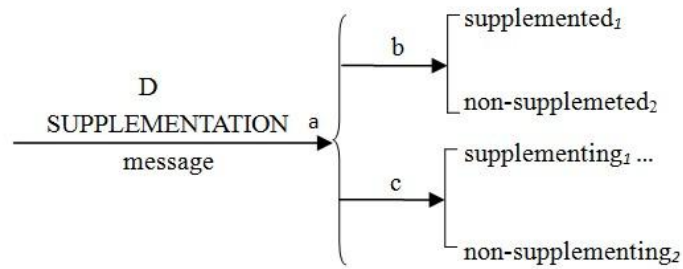


Figure 6.6 A tentative network of SUPPLEMENTATION in Cantonese message semantics (Fragment D)

As illustrated in Figure 6.6, there are two simultaneous dependent systems under *system b* - discriminating the semantic options between **[supplemented]** and **[non-supplemented]** as well as **[supplementing]** and **[non-supplementing]**. The discrimination of the semantic attributes in these systems thus enables us to capture the recursive nature of message relations⁸² (Cloran, 1994, p. 178).

6.3.4.1 Semantic options: [supplemented] vs. [non-supplemented]

The first dependent system is *system c*, concerning ‘whether an option to expand the meaning of a message through a further message is exercised’ (Williams, 1995, p. 184). A system like this thus specifies the semantic identity of message in the system of SUPPLEMENTATION, whether it is **[non-supplemented]** or **[supplemented]**. A **[non-supplemented]** message indicates that it is not expanded by another message – it outclassifies expansion in clausal level and receives no further descriptions in the system of SUPPLEMENTATION. By contrast, a

⁸² As noted by Cloran (1994) and Williams (1995), the iteration of messages in Hasan’s message semantics only captures relatedness of *adjacent* messages. In other words, the logical relation being described here is ‘a primary one’ and is only sufficient to capture the basic distinctions of message relations (Williams, 1995, p. 201). The specification of more delicate messages relations in a message complex will thus be beyond the scope of Hasan’s message semantics.

[supplemented] message suggests that the message under focus is expanded by another message. Lexicogrammatically, it is realised by an adjacent clause, preselecting clausal EXPANSION in logical metafunction. Example 6.6 illustrates the instances of semantic option **[supplemented]** and **[non-supplemented]**.

6.3.4.2 Semantic options: *[supplementing]* vs. *[non-supplementing]*

The second dependent system *system p* captures whether the message under focus is itself supplementing another message, and if it is so, in what ways the supplementation is maintained. A message, whether it is **[non-supplemented]** or **[supplemented]**, can further elaborate other messages in the speaker's turn (i.e. a **[continue]** message) or to the message in the next speaker's turn (i.e. a **[responsive]** message). To describe this particular semantic phenomenon, two contrastive systemic options are introduced viz., **[supplementing]** and **[non-supplementing]**. As their names indicate, the semantic option **[supplementing]** denotes that the message is elaborating another message. Contrary to the feature **[supplementing]** is **[non-supplementing]**. Semantically, a **[non-supplementing]** message is non-elaborating – it outclassifies logical relations among messages.

Example 6.6 exemplifies the various semantic combinations of meaning options pertaining to SUPPLEMENTATION.

Example 6.6 Kelvin - Doctor dyad

Turn S Msg ID Messages

91	D:	169	<i>heoi3</i> go	<i>diu3</i> put	<i>jim4 seoi2</i> saline drip
----	----	-----	--------------------	--------------------	----------------------------------

	Predicator		Predicator		Complement				
	‘[We’re] going to put you on a saline drip’								
170	<i>ngo5 dei6</i>	<i>tai2</i>	<i>haa2</i>	<i>di1</i>	<i>hyut3 tong4</i>	<i>go2 di1</i>	<i>je5</i>		
	2-PL	see	verbal-suffix	little	Blood sugar	those	thing		
	Subject	Predicator		Complement					
	‘we’ll check your blood sugar and such’								
171	<i>gam2</i>	<i>gan1 zyu6</i>	<i>nei5</i>	<i>zau6 jiu3</i>	<i>soeng6</i>	<i>beng6 fong2</i>			
	so	then	2-SG	need	go	ward			
			Subject	modal adjunct	Predicator	Adjunct			
	‘then you’re going up to the ward’								
172	<i>ngo5 dei6</i>	<i>jim6</i>	<i>hyut3</i>						
	2-PL	check	blood						
	Subject	Predicator	Complement						
	‘With us doing blood tests’								
173	<i>jiu3</i>	<i>jyu6</i>	<i>zo2</i>	<i>gwo3</i>	<i>jat1</i>	<i>gaa3</i>	<i>wo3</i>	<i>hou2</i>	<i>aa3?</i>
	need	expect	ASP	stay	<i>maan5</i>	<i>laa3</i>		<i>mou5</i>	
					one	PRT	PRT	right-	PRT
					night			NEG-	
	modal	Predicator		Complement		Nego-	Nego-	right	
	adjunct					tiator	tiator	TAG	Nego-
	‘you can expect to stay for the night, okay?’								
174	<i>jan1 wai6</i>	<i>hai6 gam2</i>	<i>au2</i>						
	because	keep	vomit						
			Predicator						
	‘Because you keep vomiting’								
175	<i>hou2 do1</i>	<i>aa3</i>	<i>nei5</i>	<i>seoi2 fan1</i>	<i>lau4 sat1</i>				
	many	PRT	2-SG	water	Loss				
			Subject		Predicator				
	‘that’s a lot there, your dehydration there.’								
176	<i>gam2</i>	<i>nei5</i>	<i>jau5 mou5</i>	<i>jam2</i>	<i>hou2 do1</i>	<i>zau2</i>	<i>go2 di1</i>	<i>gaa3?</i>	
	um	2-SG	have-NEG	drink	many	alcohol	those	PRT	
		Subject	Predicator	Complement				Negotiator	
	‘Um... do you drink much and such?’								
177	<i>jau5</i>	<i>di1</i>	<i>jam2</i>	<i>zau2</i>					
	have	little	drinking	alcohol					
	Pred		-icator	Complement					
	‘Yes, he drinks a little’								

Example 6.6 is an extract of the Treatment Negotiation phase of Kelvin. As illustrated, it is only one single turn here – the doctor was delivering the treatment plan to Kelvin, detailing the medical procedure that Kelvin had to undertake. Viewed from the co-text, message 169 selects **[supplemented; non-supplementing]**, suggesting a single elaborating relation. That is to say, the message itself is supplemented by an adjacent message (i.e. message 170) but it does not supplement another message. The elaborating relation continued in message 170, 171, and 172, selecting the semantic attribute **[supplemented; supplementing]**. Important in these semantic selection is that the message entails a dual elaboration. For instance, message 170 here is elaborated by message 171 and is supplementing the message 169 – the latter selects implicit additive logical relation (see Section 6.3.4.3 for further discussion on **[supplementing]**). The elaborating relation identified here thus suggests that messages 169 to 172 are semantically organised as a chain of elaborating sequence; it is this very sequence which construes the medical procedures. Following this elaborating sequence is message 173 which serves to state the consequence of carrying the procedures. Message 173 thus selects **[non-supplemented; supplementing]**.

Message 174 to 175 constitutes another elaborating relation. Viewed from the context, message 174 serves to introduce the cause whereas message 175 the result. Message 174 thus selects **[non-supplemented: supplementing]** in the sense that it elaborates message 175 by selecting a **[enhancement: covert]** supplementing relations whereas message 175 selects **[supplemented: supplementing]**

Message 176 is the last message in the doctor's turn, where the doctor was checking if Kelvin

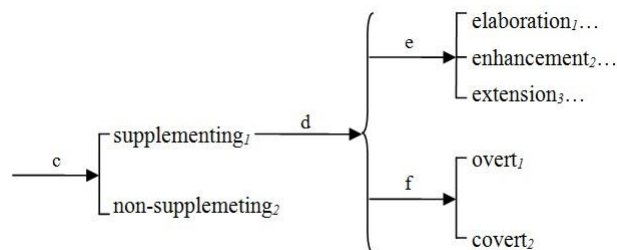
had excessive alcohol consumption. Though message 176 is experientially related to message 174 and 175 through lexical cohesion (i.e. *au2* ‘vomit’ and *jam2* ‘drink’), it, in essence, outclassifies any logical relations. Message 176 thus selects **[non-supplemented; non-supplementing]**. Following message 176 is a reply made by Kelvin’s son, or more precisely, a single message functioning to address the query point of the preceding question. It is, therefore, analysed **[non-supplemented; non-supplementing]**. The semantic analysis of Example 6.6 is summarised in Table 6.5.

Table 6.5 Analysis of the semantic options in Example 6.10

Turn	S	Msg ID	Semantic features	
			[supplemented]/ [non-supplemented]	[supplementing]/ [non-supplementing]
91	D	169	[supplemented]	[non-supplementing]
		170	[supplemented]	[supplementing]
		171	[supplemented]	[supplementing]
		172	[supplemented]	[supplementing]
		173	[non-supplemented]	[supplementing]
		174	[non-supplemented]	[supplementing]
		175	[supplemented]	[supplementing]
		176	[non-supplemented]	[non-supplementing]
92	S	177	[non-supplemented]	[non-supplementing]

6.3.4.3 Delicate semantic options of [supplementing]

To push the descriptions of Cantonese message relations systematically and categorically, this current study, following Cloran (1994) and Williams (1995), adopts Halliday’s conception of EXPANSION as the semantic basis of **[supplementing]**. Figure 6.7 presents a tentative network of **[supplementing]** in Cantonese messages.



Example 6.7A tentative network of [supplementing] in Cantonese message semantics

In SFL, EXPANSION is regarded as one of the ‘fundamental relationships’ in LOGICAL-SEMANTIC RELATION in clausal grammar, concerning how ‘the secondary clause expands the primary clause’ (Halliday and Matthiessen, 2014, p. 443). Although Halliday conceptualises expansion relations at the clausal level, it should be emphasised that relation is ‘inherently semantic’ (Cloran, 1994, p. 181), which, in a theoretical sense, can be used to model relations between linguistic entities in various level in SFL. It is, therefore, argued that the expansion relations under LOGICAL-SEMANTIC RELATION are equally applicable in describing the relations in message semantics (e.g. see Cloran, 1994 and Williams, 1995 for their arguments).

6.3.4.3.1 Semantic options: [elaboration], [enhancement] and [extension]

In principle, the semantic options [elaboration], [enhancement] and [extension] act as the points of entry of three sub-systems, classifying the message relations into more delicate options. However, to keep the semantic descriptions here manageable, these options will not be differentiated further in delicacy. Like Halliday, the semantic features [elaboration], [enhancement] and [extension] mark the logical relations so that one message elaborates, enhance or extend another message. These options thus mark messages relation between semantic domains, defining them as a ‘continuous semantic space’ (Halliday and Matthiessen,

2014, p. 460). In the system of Cantonese, these message relations are *typically* marked by CONJUNCTION in clausal grammar (for the lexicogrammatical realisations of Cantonese CONJUNCTION, see Tam, 2004).

6.3.4.3.2 *Semantic options: [overt] vs. [covert]*

As aforementioned, CONJUNCTION is typically used to relate the semantic contents across propositions. In interpreting such semantic relations, it is important to note that such relations can be realised either overtly or covertly. There are two contrastive systemic options here, *viz.*, **[overt]** and **[covert]**, reflecting the ways in which Cantonese message juxtaposition. The option **[overt]** indicates that the message relations are marked *explicitly* by covert conjunction. In the system of Cantonese, covert logical relations are typical realised lexicogrammatically either in ‘single conjunctions’ or ‘double conjunctions’ (Matthews and Yip, 2011, p. 341), the latter one is correlative in the sense that they appear in pair and juxtapose the two messages together as a message complex. By contrast, the feature **[covert]** suggests that the logical relations in a message complex are related implicitly, that is, the juxtaposition of message is expressed in the absence of conjunction. Semantically, the logical meanings expressed by **[covert]**, *contra* **[overt]**, are of relative indeterminacy, to use Williams’ (1995, p. 198) term, and are primarily determined only through the discourse⁸³. The semantic attribute **[covert]** and **[covert]** thus form a systemic contrast in *system s*.

To illustrate the delicate meaning options of **[supplementing]**, let me turn to Example 6.8 and

⁸³ As highlighted by Matthews and Yips (2011), Cantonese is a language which favors implicit juxtaposition of meanings both clausally and phrasally. Viewed in this sense, the semantic indeterminacy in a **[covert]** message reflects the semantic preferences in expressing logical relations in Cantonese.

Example 6.9.

Example 6.8 Sean - Doctor dyad

Turn S Msg ID Messages

77	D:	5	<i>e6</i> Er...	<i>bin1go3</i> which	<i>wai2</i> location	<i>tung3</i> ache	<i>gaa3</i> PRT	<i>kei4 sat6</i> Actually
				Adjunct		Predicator	Negotiator	Adjunct
				‘Ah which part does it hurt actually?’				
78	P:	6	<i>e6</i> do	<i>zou6</i> do	<i>jyun4</i> verbal-suffix	<i>wan6 dung6</i> exercise	<i>zi1 hau6</i> after	
				Predicator				
			‘Ah after working out,’					
		7	<i>zung1 gaan1</i> middle					
			Adjunct					
			‘the middle...’					
79	D:	8	<i>zing3</i> right	<i>zung1 gaan1</i> middle	<i>go2 dou6</i> That area	<i>tung3</i> ache		
				Adjunct		Predicator		
			‘Ache in the middle part’					

In Example 6.8, message 6 and 7 form a message complex, realising the answer of the preceding question (i.e. message 5). Message 6 selects the semantic option [**non-supplemented; supplementing; enhancement; covert**].

Example 6.9 Billy - Doctor dyad

Turn S Msg ID Messages

109	D:	9	<i>==hang4—hang4</i> walk	<i>lou6</i>	<i>wui2-m4-wui2</i> will-NEG-will	<i>tung3</i> hurt	<i>di1</i> more	<i>gaa3</i> PRT
					Predicator		Adjunct	Negotiator
			‘==Does it hurt more when you walk?’					
110	P:	10	<i>keoi5</i>	<i>jiu3</i>	<i>hou2</i>	<i>wun6 maan6</i>		

supplementing: enhancement: condition; overt]. By the same token, message 13 selects the semantic attributes **[supplemented; supplementing: extension: additive; overt]**. Semantically, message 13 suggests a sense of addition, which further elaborates the conditional result as in message 12.

Message 14, by contrast, indicates another elaborating relation. Viewed from the co-text, the message 14 is a clarification of message 13, specifying what Billy meant by ‘*kyut3 joeng5*’ (*‘lack of oxygen’*). Message 14 is thus analysed as **[non-supplemented; supplementing: elaboration: clarification; covert]**.

Semantically, message 16 and message 17 join together, functioning as a **[non-minimal]** answer of the preceding question (see Section 6.3.5.1.2.3.2 for a detailed discussion). As an elaborated answer, message 17 serves to add more details about the chest pain. Message 17 is thus interpreted as **[non-supplemented; supplementing: extension: addition; covert]**.

Table 6.6 summaries the selection of semantic options pertaining to Cantonese system of SUPPLEMENTATION.

Table 6.6 Analysis of the semantic options in Example 6.9

Turn	S	Msg ID	Semantic features			
			[supplemented]/ [non-supplemented]	[supplementing]/ [non-supplementing]	[elaboration]/ [extension]/ [enhancement]	[covert]/ [overt]
109	D	9	[non-supplemented]	[non-supplementing]	-	-
110	P	10	[non-supplemented]	[non-supplementing]	-	-
		11	[non-supplemented]	[supplementing]	enhancement	overt
		12	[supplemented]	[non-supplementing]	-	-
		13	[supplemented]	[supplementing]	extension	overt
		14	[non-supplemented]	[supplementing]	elaboration	covert
111	D	15	[non-supplemented]	[non-supplementing]	-	-
112	P	16	[supplemented]	[non-supplementing]	-	-
		17	[non-supplemented]	[supplementing]	extension	covert

Realisation statements of the semantic options of Cantonese SUPPLEMENTATION system are summarised in Table 6.7.

Table 6.7 Tentative lexicogrammatical realisations of meaning options of SUPPLEMENTATION (Fragment D)

	SEMANTIC OPTION	CANTONESE LEXICOGRAMMATICAL REALISATIONS
b1	[supplemented]	clause under focused is expanded by another clauses
b2	[non-supplemented]	clause under focused outclassifies expansion
c1	[supplementing]	clause under focused is expanding another clauses
c2	[non-supplementing]	clause under focused outclassifies expansion
d1	[elaboration]	preselecting elaborating relations
d2	[enhancement]	preselecting enhancing relations
d3	[extension]	preselecting extending relations
e1	[overt]	preselecting conjunction in clausal expansion
e2	[covert]	outclassifying conjunction in clausal expansion

6.3.5 Systems of RELATION ENACTMENT

In Hasan's message semantic networks, the system of RELATION ENACTMENT is a set of systems pertaining to the interpersonal metafunction, indicating the range of interpersonal meanings at the message level. Whereas Hasan's English semantic networks is primarily speech functional, the Cantonese counterpart presented here emphasises both system of SPEECH FUNCTION and system of ASSESSMENT – the former focuses on the enactment of roles and interpersonal relations in dialogic interaction whereas the latter concerns the attitudes the interactants express towards the addressee and the message *per se* through the lexicogrammatical resources. Figure 6.7 illustrates the tentative system of RELATION ENACTMENT in Cantonese.

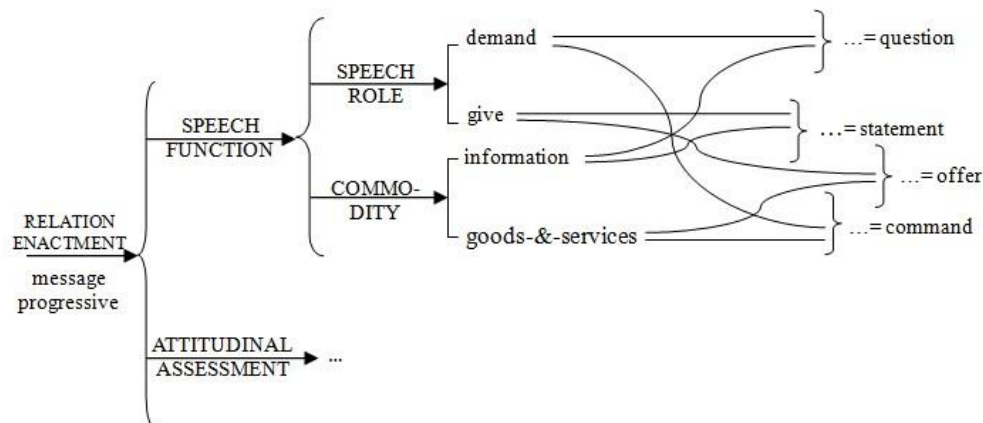


Figure 6.7 A tentative semantic network of RELATION ENACTMENT in Cantonese

6.3.5.1 Systems of SPEECH FUNCTION

Originated by Halliday, this system concerns the 'semantics of interaction', or more specifically, the enactment of roles and relations between speaker and addressee in dialogue. In SFL, dialogue is conceptualised as a 'process of exchange', so that the interactants involved in

the speech event are continuously exchanging the ‘speech role’ and ‘commodity’. Speech role, as the name indicates, specifies the ‘roles associated with exchange relations’ (Halliday, 2003b [1984], p. 11). There are two semantic options concerning speech roles in a dialogue, namely **[give]** and **[demand]** – the former suggests that the speaker performs the act of ‘giving’ whereas the latter refers to the act of ‘demanding’. Commodity, by contrast, refers to the ‘nature of commodity being exchanged’. Like Halliday, Hasan specifies two options of commodity in dialogue, namely **[information]** and **[goods-&-services]**. In other words, the dialogue between interactants can be either an exchange of information or an exchange of an object or an action (Halliday and Matthiessen, 2014, p. 135).

Given that interactants keep negotiating the speech roles and commodity in dialogic interactions, the features in the speech role and the commodity cross-classify each other as the interaction unfolds, thereby yielding four different types of speech function. More specifically, the conjunction of the semantic feature **[give]** and **[information]** give access to the speech function STATEMENT, whereas the feature **[demand]** and **[information]** give rise to QUESTION. By the same token, the conjunction of feature **[demand]** and **[goods-&-services]** give access to the COMMAND whereas the feature **[give]** and **[goods-&-services]** give rise to OFFER (see also Eggins and Slade, 2004; Matthiessen and Slade, 2011). Hasan further extends the descriptive delicacy, so that each of them serves as the point of entry of its ‘whole network of further speech-functional options’ (Halliday and Matthiessen, 2014, p. 135). Important in this extended descriptive delicacy is that it enables analysts to understand the possible meaning distinctions available in each speech function, and most importantly, to make ‘more categorical predications’ about the realisation of semantics and lexicogrammar (Martin, 1992, p. 37).

6.3.5.1.1 *Systems of QUESTION*

Prior to the discussion of system of the asking question in Cantonese, it appears necessary to define two terms, *viz.*, question and interrogative. In Cantonese literature, question and interrogative are used somewhat loosely in traditional Cantonese linguistic literature – the two terms are treated as synonym and typically translated as *ji4 man6 geoi3* 疑問句. From a systemic point of view, question and interrogative are two distinctive categories, referring to two different orders of abstraction. Interrogative is a grammatical category – it is one of the basic MOOD options in Cantonese. Question, by contrast, is a semantic category: it is of system of SPEECH FUNCTION. A question is as it is because of the conjunction of the two semantic options (i.e. [**demand**; **information**]); and it is this semantic conjunction which enables us to further describe its delicate options in the system of QUESTION.

In SFL, the distinction between QUESTION and INTERROGATIVE is important – it highlights the systematic non-comformality between semantics and lexicogrammar, or more specifically, a linguistic phenomenon technically known as ‘grammatical metaphor’ (Halliday, 1994). For Halliday, a given meaning can be expressed in both congruent and incongruent manner – the former refers to the ‘the typical ways of saying things’ whereas the latter denotes the ‘variation in the expression of a given meaning’ (Halliday, 1994, p. 341 – 342). Take question as an illustration. As in English, a Cantonese question entails both congruent and incongruent form, entailing a variety of structural realisation (Martin, 2013, p. 84). Congruently speaking, a Cantonese question is realised lexicogrammatically by interrogative mood (i.e. *yes-no* interrogative and *wh*-interrogative). Alongside congruent realisation, question can be realised incongruently i.e. questions realised in mood options other than interrogative. One noted

example in Cantonese literature is the so-called ‘declarative question’- a question which is realised lexicogrammatically by a declarative and with a rising intonation. In other words, neither are all questions expressed in the form of interrogative; nor do all interrogatives function as questions. Given the systematic non-comformality, it appears that a system network of QUESTION in Cantonese must on the one hand, *include* both the congruent and the metaphorical variants; and on the other hand, *exclude* those question-like expressions which are not functioning as demanding information in discourse (see Hasan, 2009g [1991], p. 242 for a detailed discussion on those exclusions).

As Hasan (2009g [1991], p. 251) notes, the asking of questions serves as ‘a clear indication of the desire to know some new information’. The seeking of information is thus conceptualised as a system network, embodying abundant semantic attributes available in the system of Cantonese. A tentative network of asking question in Cantonese is represented in Figure 6.8.

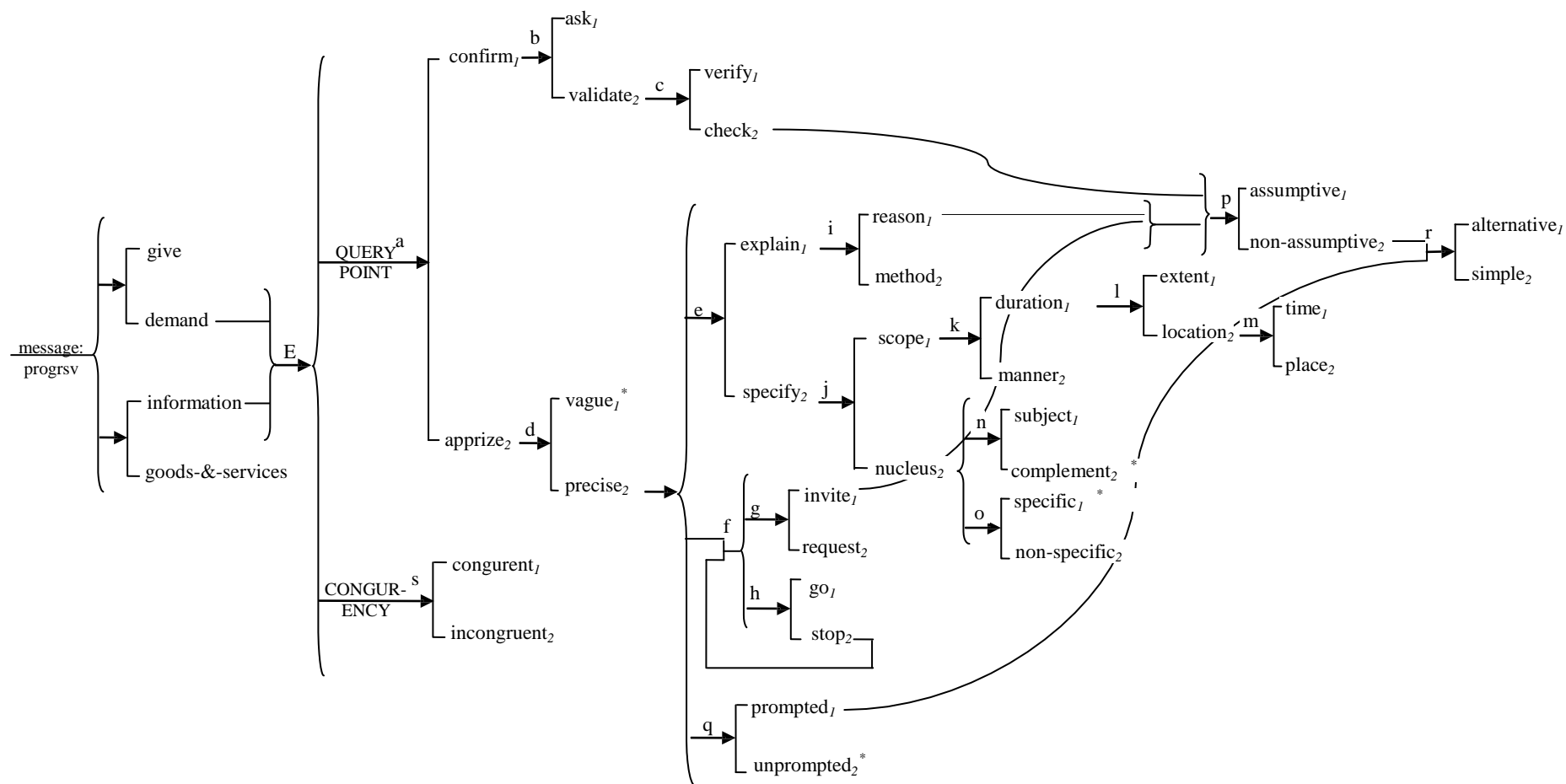


Figure 6.8 A tentative system network of semantic choices in demanding information in Cantonese (Fragment E)

As recognised in the Figure 6.8, there are two simultaneous systems subsumed under the systems of demanding information in Cantonese, namely QUERY POINT (i.e. *system a*) and CONGURENCY (i.e. *system s*).

6.3.5.1.1.1 Semantic option [confirm]

The system of QUESTION TYPE describes the types of question being enacted by Cantonese speakers. There are two types of question in Cantonese system, namely **[confirm]** and **[apprize]** – the former is popularly known as ‘polar questions’ and the latter as ‘content questions’. The distinction between the semantic option **[confirm]** and **[apprize]** lies in the types of answer presupposed by the enquirer. It should be added immediately that these semantic options only serve as the interpretation of the state of desire of the *enquirers*; and one cannot determine them directly by considering the responses of the *listeners*. In some cases, responses may be delayed, irrelevant, indirect or even absent (see Section 6.3.5.1.2.4 for a discussion).

A **[confirm]** question focuses on the truth-false condition of the particular proposition, or more specifically, its polarity, aiming at soliciting a positive or negative answer. Given it so, the semantic option **[confirm]** can be further classified into various types. In the Cantonese message semantic network, a **[confirm]** question can be further distinguished as **[ask]** and **[validate]**.

6.3.5.1.1.1.1 Semantic option [ask] vs. [validate]

In Cantonese, the different ways of construing a yes/no questions reflect the speaker’s

presupposition with respect to the answers, whether he is presupposing an agreement (either positive or negative) or a neutral answer (Matthews and Yip, 2011, p. 359). The semantic option **[confirm]** can be further classified into two semantic options, namely **[ask]** and **[validate]** (see *system b*).

In *system b*, an **[ask]** question is the ‘most natural form of yes-no question’ in the system of Cantonese (Matthews and Yip, 2011, p. 360). Semantically, the enquirer is attitudinally-neutral and has no built-in point of departure - he or she does not know true-false conditional of the proposition and would like to seek a yes-no-response (Cheung, 2007, p. 305). In this sense, the enquirer does not have any expected answers from the addressee, and the listener is given an impression that he or she could feel free to affirm or negate the question. An **[ask]** question can thus be paraphrased as ‘*I am not sure about the validity of the proposition. Is it the case or not?*’ As aforementioned, Cantonese **[ask]** question is semantically ‘unbiased’ (Halliday and McDonald, 2004). Such a neutral polarity is maintained through various lexicogrammatical means. There are three possible lexicogrammatical realisations of a **[ask]** question:

- (i) polar interrogative preselecting A-not-A interrogative marker (i.e. a linguistic construction which duplicates the verb or adjective with the negative marker in between) (Matthews and Yip, 2011: 360; see also Wu, 1990, 1996; Tam, 2004, Cheung, 2007 and many others);
- (ii) polar interrogative preselecting interrogative/questions particle *maa3*, a sub-type of

clause final particle in Cantonese traditional grammar ⁸⁴ (e.g. Kwok, 1984, Wu, 1990, 1996, Matthews and Yip, 2011; Leung, 2005, Tang, 2015 etc.) and

(iii)polar interrogative preselecting negator *mei6*, concerning the truth condition in a perfective sense (e.g. Tam, 2004 and Matthews and Yips, 2011).

Example 6.10 to 6.11 illustrates the various realisations of Cantonese [ask] question.

Example 6.10 Kelvin - Doctor dyad

Turn	S	Msg ID	Messages					
31	D:	48	<i>e6,</i>	<i>jau5 mou5</i> have-NEG-have	<i>tou5 se3?</i> diarrhea	Predicator 'Did you have the runs?'		
32	P:	49	<i>mou5</i> NEG-have	<i>aa3</i> PRT	Negotiator 'No, I don't have'			
33	D:	50	<i>mou5</i> NEG-have	<i>tou5 se3</i> diarrhea	<i>ge3</i> PRT	Complement Negotiator 'No diarrhea.'		
		51	<i>zau6</i> then	<i>jau5 mou5</i> have-NEG-have	<i>faat3</i> fev-	<i>gwo3</i> ASP	<i>siu1?</i> -er	Predicator 'Did you have any fever?'

⁸⁴ Lack of space precludes a detailed discussion of particles. In a typological sense, Cantonese is a ‘prototypical’ tonal language, which leaves little room for intonation in marking interpersonal meaning as in other languages such as English. The limited use of intonational contrast is compensated by a particular word class *viz*, particle. Generally speaking, Cantonese has a large inventory of clausal particles, with around over 100 particles (Halliday and McDonald, 2004: 342; see also Kwok, 1984; Leung, 2005 and Matthews and Yip, 2011 for a discussion of particles). This rich inventory of particles, in a systemic functional sense, is metafunctionally-regulated; each of which construe various meanings in lexicogrammar and semantics (e.g. Oichi and Lam, 2010). For example, the clausal final particles under interpersonal metafunction construe meanings such as attitudes, degree of involvements, mood, modality, scope and evidentiality (Halliday and McDonald, 2004, p. 342).

34	P:	52	<i>mou5</i> NEG-have Predicator 'No, I don't have'	<i>aa3</i> PRT Negotiator				
35	D:	53	<i>zou2 gei2</i> <i>jat6</i> past few days Adjunct 'Anything weird with the stools past few days?'	<i>heoi3</i> coverb Adjunct	<i>di1 daai6 bin6</i> the stools	<i>jau5 mou5</i> have-NEG- have Predicator	<i>gu2 gwaai3</i> weird Complement	<i>aa3?</i> PRT Negotiator
36	P:	54	<i>mou5</i> NEG-have No 'No.'					

Example 6.10 is a short extract of history-taking in Kelvin-doctor dyad, entailing three question-answer sequences, as in message 48 – 50, message 51 – 52 and message 53 – 54 respectively. In the first sequence, the doctor enacted a question, or more specifically, a semantic act selecting the option **[demand; information]** as in message 48. Important in this question is its semantic unbiassedness. Semantically, the doctor has no pre-established conception towards the proposition, and the question functions to solicit a yes-no response from the listener regarding the truth-false condition of the propositional content. In other words, a question like this thus exhibits a neutral tenor relation between the enquirer and the compliant listener. Such semantic neutrality is realised lexicogrammatically by an interrogative clause preselecting an A-not-A interrogative marker '*jau5 mou5*' (literally as 'have-NEG-have' in English). The selection expression of message 48, at this stage, is thus analysed as **[demand; information: confirm: ask]**. The employment of **[ask]** question is also identified in the subsequent two question-answer sequences, as in message 51 and message 53.

Example 6.11 Paul- Doctor dyad

Turn S Msg ID Messages

57	D:	7	<i>ang2</i> bump	<i>dou2</i> verbal-suffix Pred-	<i>sam1 hau2</i> chest Complement	<i>hai6 m4 hai6</i> be-NEG-be -icator	<i>aa3 ?</i> PRT
			‘Did you bump your chest?’				
58	P:	8	<i>hai5</i> yes Predicator	‘Yes.’			
59		9	<i>nei1 dou5</i> here Adjunct	‘Here.’			

By the same token, message 7 in Example 6.11 selects the meaning option [**demand; information: confirm: ask**]. Semantically, the message functions to probe the falsity of the thesis ‘*ang2 dou2 sam1 hau2*’. Lexicogrammatically, the predicator ‘*hai6-m4-hai6*’⁸⁵ (‘be-NEG-be’ in English) is dislocated at the end of the clause, rather than functioning as a question tag – a typical realisation of the meaning option [**verify**] (see Section 6.3.5.1.1.1.2 for a detailed discussion).

Contrast to [**ask**] is the option [**validate**]. Like [**ask**], the semantic option [**validate**] invites a yes-no response from the addressee. What is unique here is that the feature [**validate**] implies a built-in point of departure, creating a rhetorical effect of being ‘biased’ (Halliday and McDonald, 2004, p. 335). Semantically, the enquirer in a [**validate**] question entails a truth value towards the thesis – what he or she does is to ‘double check’ the existence of the

⁸⁵ The distinction between a Q-Tag and the A-NEG-A construction is fuzzy. As a native speaker of Cantonese, my own interpretation is that a question tag is always ‘contracted’ as in *hai5-maa3* and *hai5-mai2*. In this sense, the full lexical phrase *hai6-m4-hai6* in Example 6.11 is not regarded as tag, but as a predicator structured in A-NEG-A construction.

condition. A **[validate]** question can be further sub-classified into two mutually exclusive option, viz., **[verify]** and **[check]**.

6.3.5.1.1.1.2 Semantic options **[verify]** vs. **[check]**

In *system c*, a **[verify]** question functions to probe the veracity of the presented thesis, or more precisely, the inference or presupposition that the enquirer holds. Unlike other semantic options pertaining to **[confirm]**, the option **[verify]** indicates that the enquirer is explicitly asking for a response from the addressee, typically inviting ‘agreement or appreciation’ from the addressee (Matthews and Yip, 2011, p. 399, see also Tam, 2004, p. 267). Such an invitation of agreement is semantically-important – it contributes to the establishment of positive interpersonal relations between the enquirer and the compliant listener. A **[verify]** question can thus paraphrased as ‘*This is what I inferred and I am sure you will agree with me. Please confirm if I am right.*’ Lexicographically, a **[verify]** question is realised as tagged declarative, a specific mood structure constituted by a declarative clause and a mood tag⁸⁶. In Cantonese, a tagged declarative clause is organised into two parts: a declarative and a tag with a juncture in between. It is that the inference being asserted lies on the declarative, and verification is sought through the tag. Lexicographically, Cantonese mood tags are typically realised in lexical phrases like *hai5-maa3* and *hai5-mai2*⁸⁷ as well as clause final particles such as *ho2* and *ha2*. Example 6.12 and 6.13 illustrate the semantic option **[verify]** in doctor patient communication.

⁸⁶ It should be emphasised while mood tag exists in both Cantonese and English systems, its linguistic conception is, in essence, different. Whereas English mood tags are syntax-based respecting the polarity of clauses, Cantonese mood tags are semantically motivated so that the tag selection reflects the speaker’s discourse intention, such as asking for an agreement of the host proposition, seeking consent of an invitation, making a refutation etc.

⁸⁷ Following Tang (2015, p. 246), the Cantonese lexicalized phrase such as *o3ho2*, *ho2* are not treated as question tags of confirmation.

Example 6.12 Kelvin - Doctor dyad

Turn S Msg ID Messages

35	D:	53	<i>zou2 gei2 ja16</i> past few days Adjunct	<i>heoi3</i> coverb Adjunct	<i>di1 daai6 bin6</i> the stools	<i>jau5 mou5</i> have-NEG- have Predicator	<i>gu2 gwaai3</i> weird Complement	<i>aa3?</i> PRT Negotiator
'Anything weird with the stools past few days?'								
36	P:	54	<i>mou5</i> NEG-have No 'No.'					
37	D:	55	<i>mou5</i> NEG-have Predicator	<i>me1 dak6 bit6</i> Weird Complement	<i>hai6 mai6</i> be-NEG-be TAG	<i>aa3?</i> PRT Negotiator		
'Nothing special, right?'								
38	P:	56	<i>mou5...</i> NEG-have No 'No'					

In Example 6.15, message 55 selects the option **[verify]**, functioning to verify if Kelvin's stool is normal, a topic which has been negotiated in the preceding question-answer sequence. From the doctor's point of view, the employment of **[verify]** question in emergency consultation is semantically significant – not only does it enhance the information accuracy during history-taking, but also contributes to the rapport-building. Here, by rephrasing the given information into a **[verify]** question, the doctor, indeed, projects a sense of caring in the sense that he or she is enthusiastic in listening to the patient's concern and places the patient at the centre of care.

Example 6.13 Crystal - Doctor dyad

Turn S Msg ID Messages

164	P:	17	<i>e6...</i> ah	<i>ngo5</i> I Subject	<i>gam1 ciu4</i> this morning Adjunct	<i>cat1 dim2 zung1</i> seven o'clock Adjunct	<i>hei2 san1</i> wake up Predicator	<i>ne1</i> PRT
				'Ah...when I got up at seven o'clock this morning,'				
		18	<i>zau6</i> then	<i>tau4 wan4</i> dizzy Predicator	<i>laa3,</i> PRT Negotiator			
			'I was dizzy'					
		19	<i>go3</i> CL Subject	<i>jan4</i> person	<i>ne1</i> PRT	<i>dam4dam4zyun2</i> spinning Predicator	<i>gam2joeng2</i> like this	
			'I was spinning and such.'					
164	D:	20	<i>m6,</i> Mm 'Mm'					
		21	<i>hou2</i> good Predicator	<i>aa3</i> PRT Negotiator				
			'Okay.'					
		22	<i>cat1 dim2 zung1</i> seven o'clock Adjunct	<i>hei2,</i> start Predicator	<i>==hai6 mai2</i> ==right-not-right TAG	<i>aa3?</i> PRT Negotiator		
			'At seven o'clock you==u start dizzy, right?'					
		23	<i>==hei2—hei2</i> wake up Predicator	<i>cong4</i> bed				
			'==Out-out of bed.'					

By the same token, message 22 in Example 6.13 selects the meaning option **[verify]**. Like Example 6.15, such a semantic selection here 'marked' in rapport building. This is particularly true in the case of Crystal, who is a patient with anxiety and panic disorder. The meaning of reassurance is further sustained by the clause-final particle '*aa3*', a negotiator in the Cantonese interpersonal structure which conveys a sense of softening /neutralizing to the question and the listener (see Kwok 1984; Leung, 2005; Matthews and Yip, 2011; Tang, 2008, 2015 and many

others). Viewed in this sense, the co-occurrence of a Cantonese tag and the particle *aa3* in the [verify] question thus serves as a valuable relation enactment strategy in medical context.

Complementary to [verify] is the semantic option [check]. Like English, a Cantonese [check] question exerts a ‘biased’ rhetorical effect, attempting to ‘draw an attestation from the addressee’ (Hasan, 2009g [1991], p. 246). The semantic option [check] is, to a certain extent, resembles [ask] and [verify] – on the one hand, it functions like [ask] in that it does not entail an expected response from the addressee; and on the other hand, it behaves like [verify] and has ‘biased’ rhetorical effect (Halliday and McDonald, 2004). In a general sense, a Cantonese [check] question can thus be paraphrased as ‘*I have some reservation against this state of affairs: tell me what you think*’.

Example 6.14 demonstrates some instances of [check] questions in doctor-patient communication (see Section 6.3.5.1.1.3 for a discussion on the delicate semantic options of [check] and its respective lexicogrammatical realisations).

Example 6.14 Ada - Doctor dyad

Turn S Msg ID Messages

20	D:	39	o6== oh ‘oh==’			
21	P:	40	==lap1 lap1 ge3 Dice-ish PRT Complement Negotiator ==Small and semi-formed			
22	D:	41	zung2 zi1 mui5 jat1 ci3 o1 jyun4 siu2 siu2 anyhow every time to shit ASP a little			

			Adjunct		Predicator		Adjunct
			‘Anyhow, after getting a little of it out each time;’				
		42	<i>syu1 fuk6</i> comfortable Complement	<i>di1</i> a bit Adjunct	<i>ge3 ?</i> PRT Negotiator		
			‘you felt a bit more comfortable.’				
23	P:	43	<i>hai6</i> Yes Predicator	<i>laa3</i> PRT Negotiator			
			‘Yes, it is right.’				
24	D:	44	<i>daan6</i> <i>hai6</i> but	<i>keoi5</i> 3-SG it	<i>jau6 m4</i> <i>hai6</i> NEG-be	<i>o1</i> to shit Predicator	<i>dou3</i> verbal-suffix water-like Complement
			‘But it wasn’t watery?’				
							<i>seoi2 gam2</i> PRT Negotiator
							<i>ge3 ?</i>
25	P:	45	<i>hai6</i> Yes Predicator	<i>laa3</i> PRT Negotiator			
			‘Yes, it is right.’				
26	D:	46	<i>hai6</i> Yes Predicator	<i>laa3</i> PRT Negotiator			
			‘Yes, it is right.’				
		47	<i>laan6 laan2 dei2</i> broken	<i>seoi3 seoi2 dei2</i> mushy	<i>soek3 soek2 dei2</i> shred	<i>gam2 joeng2</i> alike	<i>ge3 ?</i> PRT Negotiator
			‘Right, mushy pieces and shreds and such?’				
				Complement			
27	P:	48	<i>m4</i> NEG	<i>hai6</i> be Predicator			
			‘No, it is not.’				
		49	<i>jat1 lap1 lap1 lap1</i> Dice-ish Complement	<i>lo1</i> PRT Negotiator			
			‘It is dice-ish.’				

Example 6.14 is an illustration of the meaning option [**check**]. As shown in the above extract, the doctor enacted three questions, as in message 41 and 42, message 44 and message 47; each

of which concern Ada's bowel condition. Generally speaking, these three questions are similar in the sense that they point to the same semantic phenomenon. That is to say, though the doctor was not certain about Ada's stool condition, he did entail some medical assumptions regarding Ada's situation. What the doctor did here is to check his understanding of what Ada said, thereby determining whether her clinical presentation fitted in his built-in assumptions. In this sense, the semantic function of the questionings is to validate the assumptions, rather than asking if they are so. Message 41, 42, message 44 and message 47 are thus analysed as **[confirm: validate: check]**.

6.3.5.1.1.2 Semantic option [apprize]

Whereas a Cantonese **[confirm]** question solicits a yes-no response, an **[apprize]** question, by contrast, interrogates a specific piece of information in the proportion from the addressee (Hasan, 2013, p. 292). By Cantonese **[apprize]**, I define it as the semantic attribute in which the content-question leaves the cognitive gap open – the enquirer offers the listener more responsibility and freedom in filling it out (Lukin, 2013, p. 136). In other words, it is not the selection of the truth-false condition but the specification of the information which realises the feature **[apprize]** grammatically. Lexicogrammatically, this meaning option of Cantonese **[apprize]** is realised by an *[indicative]* clause.

Like **[confirm]**, the option **[apprize]** can be further discriminated. Unlike Hasan's (1983) simplified network which has been reproduced in her publication (see Hasan 2009[1990] and Hasan *et al.*, 2007 for a recent account), the network of asking question here is further developed, encompassing the meaning options in terms of (i) the specification of point of enquiry, (ii) the way of solicitation (both congruent and incongruent realisation of QUESTION); (iii) the nature of information being sought and (iv) whether the question is prompted.

6.3.5.1.1.2.1 Semantic option [precise] vs. [vague]

As indicated in Figure 6.7, the semantic option **[apprize]** serves as the entry condition of *system e*, discriminating the semantic option between **[precise]** and **[vague]**. In the Cantonese semantic sense, a **[precise]** question, like English, entails a point of enquiry constructed either (i) interpersonally through a preselection of wh-interrogative marker or mood particle (i.e. **[invite]**) or experientially through ideational metaphor (i.e. **[request]**). Semantically, the

explicit enquiry point in **[precise]** question is of medium or neutral degree of interrogativity. That is to say, it is the most ‘unmarked’ construal in **[apprize]** question in which a questioner invites an answer from the addressee regarding the point of enquiry. *Contra* **[precise]**, **[vague]** denotes an implicit point of enquiry – the question *per se* entails an empty cognitive gap. A **[vague]** question is thus context dependent question in which the gap is by-and-large recovered from the material situational setting. A typical example of **[apprize: vague]** question is ‘*nei5 hai6 ...*’ (‘*You are...?*’ or ‘*Your name is...?*’) – a question realised by an declarative with an implicit point of query (i.e. an outclassification of wh-interrogative markers and mood particle in Cantonese (cf. **[frame]** question in Martin, 2013, p. 85). Interpersonally, the implicit point-of-enquiry construal in **[vague]** question, like those Cantonese mood tags in **[verify]** one, serves as an important semantic strategy in calibrating mutual engagement among interlocutors. That is, in filling the cognitive and lexicogrammatical needs, the enquirer is actively maintaining the dialogic engagement through his strong desire in receiving a verbal response from the addressee. The systemic contrast of **[precise]** and **[vague]** thus serves as one key perspective in accounting for the degree of engagement in **[apprize]** question.

6.3.5.1.1.2.2 Semantic option [precise] and its sub-options

The semantic option in turn acts as the entry condition of a simultaneous system of two sub-systems:

System e concerns the type of semantics of enquiry point, selecting the semantic choice **[explain]** or **[specify]** – the former concerns the solicitation of explanation whereas the latter the specification of information conflating with Subject and Complement in lexicogrammatical stratum.

System f is a simultaneous system, selecting the meaning option **[request]** or **[invite]** in *system g* and a recursive system in *system h*. The semantic option **[request]** solicits the apprising element through ideational metaphor as COMMAND (Halliday and Matthiessen, 2006). Lexicographically, the Predicator conflates with Verbal process, with its enquiry point re-packed as Complement in clausal grammar. *Contra* **[request]**, the option **[invite]** elicits the information through content question. A Cantonese **[invite]** question is thus similar to what Hasan terms it as **[apprize]** English question. In the system of Cantonese, it is realised by *wh*-interrogative marker or mood particle as lexicogrammatical realisation.

This two systems cross-cut one another, thereby yielding number of semantic option clusters pertaining to content questions. For presentation, the semantic options of **[invite; explain]** and **[invite; specify]** are first explored in Section 6.3.5.1.1.2.2.1, followed by a discussion of **[request; explain]** and **[request; specify]** in Section 6.3.5.1.1.2.2.2. A small section concerning the system of PROMPTING is devoted in Section in 6.3.5.1.1.2.2.3.

6.3.5.1.1.2.2.1 Semantic options pertaining to [invite: explain] and [invite: specify]

In a semantic sense, the intersections **[invite; explain]** and **[invite; specify]** capture what Halliday would term as congruent question (i.e. question realised by *wh*-interrogative). As shown in Figure 6.7, the mapping here, in some sense, shades into the experiential system networks. However, it should be emphasised that the descriptions here are interpersonal-oriented in a sense that it signals the nature of the query point in a Cantonese question.

As Lukin (2013, p. 136) observes, an **[explain]** question carries a rhetorical effect of ‘instruction’, that is, the compliant listeners are required to offer explanation to the state of affairs. Such an explanation deals with two particular aspects, namely **[reason]** and **[method]**. As the name indicates, the semantic option **[method]** concerns ‘by what means’. A **[method]** question thus interrogates the compliant listeners in what ways they carry out the action. In Cantonese, such a question is typically realised by *wh*-interrogative markers such as *dim2* or *dim2 yeung2* (‘how’).

Complementary to **[method]** is **[reason]**, which forms a systemic contrast in *system f*. Semantically, the meaning option **[reason]** concerns the meaning of ‘why’. A **[reason]** question thus interrogates the compliant listeners the reason in doing something. Lexicogrammatically, a **[reason]** question is typically realised by a *wh*-interrogative preselecting *wh*-interrogative marker such as *dim2 gai2* or clause final particle *ge2* (literally as ‘why’ in English) (see Section 6.3.5.1.1.3.2 for a detailed discussion on **[reason]**). Example 6.18 illustrates the instances of these options in ED context.

Example 6.18 Paul – Doctor dyad

65	D:	22	<i>dim2 joeng2</i>	<i>zing2</i>	<i>dou2</i>	<i>gaa3</i>				
			Wh-int: method	hurt	verbal-suffix	PRT				
			Adjunct	Predicator	Negotiator					
			‘How did you get hurt?’							
66	P:	23	<i>zik1 hai6</i>	<i>[[zou6 je5</i>	<i>go2 tiu4—go2 tiu4]]</i>	<i>tung1</i>	<i>daa2</i>	<i>maai4</i>	<i>lei4</i>	
			I mean	work	that	pipe	hit	verbal-suffix	verbal-suffix	
			Subject						Predicator	
			‘I mean, the pipe that I was working with hit me’							

As illustrated in Example 6.18, message 22 and 23 constitutes an exchange sequence. Viewed from the co-text, message 22 serves to solicit how Paul hurt his chest whereas message 21 functions as an answer where Paul gave a detail account on the ways he got hurt (i.e. the pile that he was working with hit him accidentally). Message 22 is thus analysed as **[apprize: precise: invite; explain: method]**. Had the wh-interrogative marker ‘*dim2 joeng2*’ in message 22 been changed to ‘*dim2 gai2*’ as in ‘*dim2 gai2 zing2 dou2 gaa3*’ (‘*Why did you get hurt?*’), the semantics of message 22 would have been selected **[apprize: precise: invite; explain: reason]**, where the query point lies in the causes of the accident.

The semantic option **[specify]**, by contrast, denotes another semantic phenomenon in question. Rather than carrying out the linguistic instruction, a **[specify]** question concerns ‘some details of event structure’ (Hasan, 2013, p. 293) so that the listener has to specify the information of the event structure. That is to say, he or she has to specify the missing elements within the experiential configuration of the question. Based on the semantic meanings of the missing elements, the option can be further distinguished into two sub-types *viz.*, **[scope]** and **[nucleus]**. Questions selecting these options thus enable us to specify the ‘over-all goings on’ (Hasan, 2013, p. 293).

The option **[scope]** concerns the circumstantial meanings of *when*, *where*, *how* etc. (Hasan, 2009 [1990], p. 98). The query point of **[scope]** questions thus conflates with the Adjunct in a clause interpersonally. Viewed in this sense, the option **[scope]** can be broadly sub-classified as **[duration]** and **[manner]** – the former is further sub-classified as **[extent]**, **[location]**, **[time]** and **[place]** respectively. In a lexicogrammatical sense, a **[scope]** question is realised by wh-

interrogative preselecting the open-interrogative markers denoting the meanings of time, place, manner and extent etc., such as *gei2 dim2* (what time), *bin1 do5* (where, which way, which direction), *gei2 doh1* (how much/many) etc. In the system of Cantonese grammar, these markers conflate with Adjunct of the clause interpersonally or with the circumstantial element experientially.

Complementary to **[scope]** is **[nucleus]**. Semantically, it serves to name the unclear component in the state of affairs (Hasan, 2013, p. 293). A question selecting the option **[nucleus]** thus specifies the meanings pertaining to *who*, *what* and *which one etc.* The option **[nucleus]**, in turn, serves as the entry condition of a simultaneous system, discriminating meanings further from *system l* (i.e. **[subject]** vs. **[complement]**) and *system m* (i.e. **[specific]** vs. **[non-specific]**). With regard to the former, it details the INTERPERSONAL ROLE of the query point in the message- whether it serves as Subject or Complement in the message. A **[nucleus]** question with a Subject as its query point is thus marked as **[subject]**, whereas Complement as **[complement]**. With regard to the latter, it indicates the DEICTIC of the information being interrogated. By ‘deictic’, I draw on Halliday’s (1994, p. 181) notion, referring to the element which indicates ‘whether or not some specific subset of the *Thing* is intended; and if so, which’. If this view is true, it follows that the query point of a **[nucleus]** question, or more specifically, the potential referent, can be specified as either ‘specific deictic’ and ‘non-specific deictic’. A **[nucleus]** question with a specific deictic as its query point is thus marked as **[specific]**, whereas non-specific one as **[non-specific]**. In the system of Cantonese, the meaning option **[specific]** is typically realized by ‘bin1’ as in *bin1 go3 or bin1 wai2* (who), *bin1 (yat1) goh3*, *bin1 yeung2* (literally *which* + quantifying unit such as person or thing), whereas **[non-specific]**

one as *me1 ye4* or *mat1 ye4* (‘what thing’) etc.

Example 6.15 and Example 6.16 illustrate some instances of Cantonese semantic option [specify] and its delicate meaning options in the context of emergency care.

Example 6.15 Billy - Doctor dyad

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104	D:	1	<i>e6,</i> Er <i>Billy</i> Billy Billy ‘Er, Billy’	<i>aa3</i> PRT Negotiator				
105	D:	2	<i>teng1</i> hear Predicator ‘I hear from nurse that...’	<i>gul noeng4</i> nurse Complement	<i>gong2</i> say Predicator	<i>waab</i> COMPLEMENTIZER		
			<i>nei5</i> 1-SG Subject ‘you have a bit chest piain’	<i>jau5</i> have Predicator	<i>di1</i> a bit Complement	<i>sam1 hau2 tung3</i> chest pain		
	D:	3	<i>gei2 si4</i> Wh-int: time Adjunct ‘When did it start?’	<i>hoi1 ci2</i> start Predicator	<i>gaa3</i> PRT Negotiator			
106	P:	4	<i>ziu1 zou2</i> this morning Adjunct ‘Started in the morning.’	<i>hoi1 ci2</i> start Predicator	<i>gaa3</i> PRT Negotiator			
		5	<i>gam2</i> and	<i>haa6 zau3</i> afternoon Adjunct	<i>jyut6 lai4 jyut6 tung3</i> get more pain Predicator ‘and it got worse in the afternoon.’			
107	D:	6	<i>gam2</i> and	<i>aa3</i> PRT	<i>sam1 din6 tou4</i> electrocardiogram Subject	<i>ne1,</i> PRT	<i>bei2</i> compare Adjunct	<i>soeng6 ci3</i> last time <i>jau5</i> have Predicator
			‘And your electrocardiogram is a bit different from the last one.’					

<i>di1</i>	<i>m4 tung4</i>	<i>ge2</i>
a bit	difference	PRT
Complement		Negotiator

7	<i>dim2 joeng2</i>	<i>tung3 faat3</i>	<i>aa3</i>
	how	hurt. type	PRT
	Wh-int: manner	Predicator	Negotiator
	‘How is the pain?’		

108	P:	8	<i>laa2</i>	<i>zyu6</i>	<i>fu1 kap1</i>	<i>==go2 di1</i>
			tight	ASP	breath	and such
			Predicator		Complement	
			‘It tightens up, the breathing==and such.’			

In Example 6.15, message 3, in a semantic sense, is a question in which the doctor asked Billy to specify when his chest pain developed. Message 3 thus selects the meaning options [**specify: scope: time**], and is lexicogrammatically realised by the temporal wh-interrogative marker ‘*gei2 si4*’ (literally as ‘when’ in English’). Similarly, message 7 serves as an open-end question, inviting Billy to describe how the pain hurt him. Semantically, message 7 is thus analysed as [**apprize: precise: invite; specify: scope: manner**].

Example 6.16 Paul - Doctor dyad

Turn S Msg ID Messages

63	D:	19	<i>e6</i>	<i>zou6</i>	<i>me1</i>	<i>gung1</i>	<i>gaa3</i>	<i>nei5 ?</i>
			er	work	Wh-int: what	job	PRT	2 -SG
				Pre-	Complement	-dicator	Negotiator	Subject
			‘Er, what do you do?’					
64	P:	20	<i>zou6</i>	<i>dei6 pun4</i>	<i>lo1</i>			
			work	construction site		PRT		
			Predicator	Complement		Negotiator		
			‘Work at construction sites.’					
65	D:	21	<i>zou6</i>	<i>dei6 pun4</i>				
			work	construction site				
			Predicator	Complement				
			‘Construction sites.’					

As seen in Example 6.16, there are two questions in Paul – Doctor dyad, namely message 19 and message 22. Semantically, message 19 serves as an open-end question, inviting Paul to specify his occupation. Here, the wh-interrogative marker ‘*meI*’ (‘what’) is deictically non-specific in the sense that Paul could provide any answers provided that it can address its query point. Message 19 is thus analysed as **[specify: scope: nucleus: complement: non-specific]**.

6.3.5.1.1.2.2 Semantic options pertaining to [request: precise] and [request: specify]

Contra **[invite; explain]** and **[invite; specify]**, the semantic options **[request: precise]** and **[request: specify]** serve to capture one specific type of incongruent question, or what I term it as ‘request question’ (i.e. question realised by imperative). Compared with **[invite]**, there are three specific aspects that deserve to be noted in **[request]**:

- (i) In terms of function, a **[request]** question, like the **[invite]** one, serves to solicit both explanation and specification, yielding both **[request; explain]** and **[request; specify]** questions – the former discriminates **[reason]** and **[method]**, whereas the latter selects the semantic option **[reason]**, **[method]**, **[extent]**, **[time]** and **[place]**. However, what is unique here is that Cantonese **[request; specify]** questions only prompts into information conflating with Complement, constituting what Hasan (1999) would term it as default dependency as in **[request; specify: nucleus: complement; specific]**.
- (ii) In terms of meaning, a **[request]** question is ‘interpersonal marked’ – the markedness in SOCIAL DISTANCE and SOCIAL ROLE enables addresser to exert

‘directiveness’ on addressee, thereby scaling up the degree of interrogativity (see Section 6.3.5.1.1.5 for a detailed discussion on CONGURENCY).

- (iii) In terms of lexicogrammatical realisation, **[request]** questions are realised by (i) imperative clause preselecting Verbal process as Predicator and (ii) a re-construal of enquiry point from Adjunct and/or Negotiator to Complement₁ through ideational grammatical metaphor (see Halliday and Matthiessen, 2006). The realisation thus constitutes a sequential ordering as in # (S) ^ P/Verbal Process ^ Complement₂ ^ Complement₁. Table 6.8 tabulates the comparison of congruent question and command question.

Table 6.8 A comparison of [invite] questions and [request] questions in Cantonese

Grammatical metaphor		Non-metaphorical		Ideational grammatical metaphor	
Type of question		[invite] questions (i.e. congruent question)		[request] questions (i.e. incongruent question)	
Structural construction		Adjunct (wh-interrogative marker) ^ Negotiator (mood particle)		# ^ P/Verbal Process ^ Complement 2 ^ Complement 1	
		Adjunct	Negotiator	Predicator	Complement 1
		wh-interrogative marker	Mood particle	Verbal Phrase	Noun Phrase
Semantic attribute	[reason]	<i>dim2 gai2</i>	<i>ge3</i>	<i>wa6, gong2</i>	<i>jyun4 jan1</i>
	[method]	<i>dim2 joeng6 + verb</i>			<i>fong1 faat3, baan6 faat3</i>
	[extent]	<i>gei2 + adj./adv,</i>			<i>cing4 dou6</i>
	[time]	<i>gei2 dim2, gei2 si4</i>			<i>si4 gaan1</i>
	[place]	<i>bin1 do5, bin1 syu2</i>			<i>dei6 fong1</i>
	[manner]	<i>dim2</i>			-

NB: In Cantonese, it is less likely to have a metaphorical usage of **[request; specify: scope: manner]**. Further

exploration is required.

6.3.5.1.1.2.3 Semantic options [assumptive] vs. [non-assumptive]

Like English, the Cantonese system of assumptiveness concerns whether an ‘unvoiced assumption’ is maintained by the speaker in questioning (Hasan, 2009g [1991], p. 249, see also Hasan, 2010 and many others). Important in it is that this unvoiced thesis is contradictory to the state of affair perceived by the enquirer; he or she thus enacts a question to seek further information. Viewed in this sense, an assumptive question is not a ‘straight question’; it is, in essence, a question with attitude (Hasan, 2013, p. 293). In the proposed Cantonese network, there is a particular system concerning assumptiveness – *system m*. In this system, two contrastive systemic options are introduced, namely **[assumptive]** and **[non-assumptive]** – the former denotes that the question enacted entails an unvoiced assumption where the latter does not. While the conception of ‘assumptiveness’ appears to be a general semantic phenomenon across languages (at least in the case of English and Cantonese), subtle distinctions remain in terms of (i) semantic potential and (ii) lexicogrammatical realisation.

First, Cantonese assumptiveness is semantically selective. In the Cantonese system, only the semantic option **[check]** and **[invite: reason]**, which can serve as the entry condition to system of assumptiveness, thereby discriminating the semantic choices further into **[assumptive: check]**, **[non-assumptive: check]**, **[assumptive: invite: reason]** and **[non-assumptive: invite: reason]**. This contrasts with English in which **[ask]**, **[check]** and **[reason]** could act as the point of entry to system of assumptiveness. The semantic restriction, in some sense,

reflects the characteristic semantic environment in Cantonese⁸⁸.

Second, whereas the unvoiced thesis is typically marked by the selection of negative polarity in English system (Hasan, 2009), the Cantonese system favors the use of negation or assumptive particles. By ‘assumptive particles’, I refer them as a particular set of clause-final particles (CLPs) in Cantonese (Wong, 2009; see Kwok, 1984; Leung, 2005 and Matthews and Yip, 2011 for a discussion of CLP in traditional grammar). Important in it is that they are semantic-oriented, indicating not only the entailment of unvoiced assumption in the question, but also conveying the enquirer’s emotional and attitudinal states, whether that may be ‘surprise, disappointment, doubt, enthusiasm’ etc. (Hasan, 2010, p. 293). The attachment of assumptive particles thus increases the semantic range of a question.

6.3.5.1.1.3.1 Semantic options [assumptive: check] vs. [non-assumptive: check]

Semantically an **[assumptive: check]** question indicates that there is an ‘unvoiced assumption’ maintained by the enquirer (Hasan, 2009g [1991], p. 249). More specifically, the question is attitudinally-marked in the sense that this unvoiced thesis is contradictory to the state of affair perceived by the enquirer. An **[assumptive check]** question can thus be paraphrased as ‘*I am surprised or amazed that the state of affairs contradicts to what I perceive. I would like to validate if it is true*’.

In the system of Cantonese, an **[assumptive: check]** question is lexicogrammatically realized

⁸⁸ In my view, a Cantonese **[ask]** question cannot be assumptive for it is semantically unbiased (Halliday and McDonald, 2004). The unbiased rhetorical effect thus precludes the attachment of assumptive particles to **[ask]** questions.

by a ‘particled declarative’ i.e. a declarative with an assumptive particle being attached at the end of the clause. Central to the particle attachment in **[check]** question is that the assumptive particles entail both non-segmental and segmental expressions (see Leung, 2005). As Leung notes:

- (i) Non-segmental particles: a prosodic realisation which exerts an effect particularly on the final lexical tone. In Fox *et al.*’s recent (2008) term, it is known as ‘utterance final intonation’⁸⁹.
- (ii) Segmental particles: the most abundant type of particles in Cantonese, denoting both speech act and its illocutionary force. Lexicogrammatically, they can be either single (i.e. monosyllabic form) or compound (i.e. a combination of single particles) (Leung, 2005, p. 57).

With regard to type (i), the **[check]** question is realised phonologically by a declarative plus rising utterance-final intonation. Linguistically, it is the final utterance intonation which turns the declarative into an assumptive **[check]** question. The use of final rising tone in turning a declarative into question as well as indicating doubts and suspiciousness is, perhaps, a

⁸⁹ Traditionally, Cantonese is typically regarded as tonal language, leaving little room for Cantonese intonation. However, recent phonological studies suggest that intonation does exist in Cantonese so that lexical tone and utterance intonation interact with each other in its own right (Ma, 2007). Recognising the tone-intonation interaction in Cantonese, Fox *et al.* (2008) categorize Cantonese utterance intonation into two parts, *viz.*, ‘utterance body-intonation’ and ‘utterance-final intonation’. In their view, it is the utterance-final intonation which is semantically-significant, denoting the speech act and its illocutionary force. For example, the falling utterance-final intonation of a declarative indicates the speech act as statement whereas a rising one as question. In this sense, intonation and particles are not mutually exclusive; they are the same in the sense that serve similar interpersonal functions in Cantonese. Intonation can thus be regarded as a variant of particle, or more specifically, a non-segmental particle, which acts prosodically on the message/clause-final position.

universal feature across languages. Cantonese is of no exception. In traditional Cantonese grammar, such an utterance is known as declarative question (e.g. Matthews and Yip, 2011, *a.k.a.* intonation questions in Cantonese linguistics, see Wu, 1990, 1996). Example 6.17 illustrates an instance of **[assumptive: check]** question.

Example 6.17 Crystal – Doctor dyad

224	D:	93	<i>nei5</i> 2-SG	<i>go3</i> CLASSIFIER Subject	<i>tou5</i> abdomen	<i>jau5 mou5</i> have-NEG-have	<i>m4 syu1 fuk6</i> uncomfortable	<i>aa3?</i> PRT Negotiator	
			‘Does your stomach feel queasy?’						
225	P:	94	<i>ngo5</i> 1-SG	<i>go3</i> CLASSIFIER Subject	<i>tou5</i> abdomen	<i>ni1 paai4</i> recently Adjunct	<i>hou2</i> very Adjunct	<i>zoeng3</i> bloated Predicator	<i>lo1 !</i> PRT Negotiator
			‘It feels very bloated lately!’						
226	P:	95	<i>hou2</i> very Adjunct	<i>zoeng3?</i> bloated Predicator					‘Very bloated?’
		96	<i>jau5</i> have Predicator	<i>si2 o1</i> pass stool	<i>gaa1 maa3</i> , PRT Negotiator	<i>hai6 mai1 aa3?</i> right-NEG-right TAG	‘You pass stool regularly, don't you?’		

Message 95 in the above example is a good instance of **[assumptive: check]**. Viewed from the context, message 95 is a question responding to Crystal’s reply, functioning to check what she meant by ‘bloated’. Here, Crystal’s reply amazed the doctor for it contradicted with the doctor’s unvoiced thesis. Doctor’s sense of contradiction is this realised semantically as **[assumptive: check]** – a check question which is realised prosodically by a declarative plus a rising utterance-final intonation. In other words, message 95 is not merely a simple check question; it is attitudinally-marked in the sense that the doctor projects a sense of suspiciousness to Crystal.

With regard to type (ii), the **[check]** question is realised lexicographically by attaching a small set of segmental particles such as *me1*, *gaa4*, *laa4*, and *aa4* to the end of a declarative (see Matthews and Yip, 2011; Leung, 2005; Tang, 2015 and many others). Linguistically, the assumptive particles in **[check]** question serves two major functions – not only do they function as the question particle (i.e. turning a declarative into a question), but also functions as attitudinal particles, conveying the enquirer’s assumptiveness and his or her emotion (see system of ATTITUDINAL SSESMENT in Section 6.3.5.2).

Example 6.18 Kelvin- Doctor dyad

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71	D:	134	<i>nei5</i> 2SG Subject	<i>sik6</i> take Predicator	<i>zo2</i> ASP Adjunct	<i>gei2 do1 ci3</i> how-many-times	<i>aa1</i> PRT Negotiator	<i>ni1 di1?</i> this Complement
'Hey, how many times did you take the meds?'								
72	S:	135	<i>nei4 di1</i> this Complement	<i>joek6</i> med	<i>==zau6 mou5</i> have-not-have Adjunct	<i>sik6</i> take Predicator	<i>gwo3</i> ASP	
'These meds==he didn't take them'								
73	P:	136	<i>== jat1</i> one Adjunct	<i>ci3</i> ° time	(weak voice)			
'==Once.'								
74	D:	137	<i>sik6</i> take Predicator	<i>zo2</i> ASP	<i>laa4?</i> PRT Negotiator			
'You did?'								
75	P:	138	<i>jat1</i> one Adjunct	<i>ci3</i> ° time	(weak voice)			
'Once.'								

Example 6.18 presents another use of **[assumptive: check]**. Semantically, the doctor first enacted an **[ask]** question as in message 134, soliciting whether Kelvin had taken the pills. Based on Kelvin's son answer, the doctor entailed a perception that Kelvin had not taken the pill. However, Kelvin's subsequent reply was in contrast to what Kelvin heard from the son. As a result, the doctor enacted a **[assumptive: check]** question (i.e. message 74), reconfirming what he heard from his son was correct. Semantically, it is this contradiction and his doubt which motivates the doctor to produce an **[assumptive; check]** question. Unlike Example 6.17, the check question is realised segmental by attaching an assumptive particle *laa4* at the end of a declarative clause. Lexicogrammatically, the assumptive particle *laa4* is a product of '*laa3*' and '*aa4*', denoting a sense of rhetorical tone of surprise, skepticism or disapproval (Tang, 2015, p. 234 – 235). Message 137 can be paraphrased as '*I am doubtful that what I perceived from your son is contradictory to what you said just now. Can you reconfirm the validity of the answer once again?*'

By contrast, a **[non-assumptive]** question entails no assumption and is therefore attitudinally unmarked – the enquirer attempts to validate the thesis through paraphrasing it. A **[non-assumptive]** check question can thus be paraphrased as '*This is what I perceived and predict. Please tell me if it is true*'. In the system of Cantonese, a **[non-assumptive]** check question can be realised in a number of ways. This includes:

- (i) lexicalised phrase *zik1 hai6* (literally as 'that means' in English) plus a declarative with a juncture in between or

- (ii) declarative plus a clause final particle *ge3* or falling utterance final intonation
- (iii) declarative plus a clause final particle or *le3*.

Semantically, these realisations indicate subtle meaning orientations. Realisation (i) suggests that the non-assumptive check question is more or less a paraphrase – the enquirer is re-phrasing what is heard in his or her own words. By contrast, realisation (ii) implies that the enquirer is committed to his thought, and the content being checked is presented as an assertion. Realisation (iii) indicates that the question is an inference, or more precisely, the prediction to which the enquirer is committed.

Example 6.19 Billy – Doctor dyad

Turn S Msg ID Messages

552	D:	116	[117]	<i>jau5 mou5</i> have-NEG-have	<i>hou2</i> good	<i>di1</i> a bit	<i>aa3?</i> PRT Negotiator	
				Predicator				
				‘ [117], do you feel better?’				
552	D:	117	<i>sik6</i> eat	<i>zo2</i> ASP	<i>di1</i> a bit	<i>joek6</i> medicine		
			Predicator		Complement			
			‘after taking the meds?’					
553	P:	118	<i>gam2 gok3 soeng6</i> feeling.raise	<i>dou1 hai6</i> still	<i>m4 hai6</i> NEG-be	<i>hou2</i> very	<i>daai6</i> big	<i>goi2 sin6</i> improvement
			Adjunct	Adjunct	Predicator	Complement		
			‘Personally, there isn’t much improvement.’					
554	D:	119	<i>zek1 hai6</i> that is	<i>m4 hai6</i> NEG-be	<i>hou2</i> very	<i>daai6</i> big	<i>goi2 sin6</i> improvement	<i>aa3 ?</i> PRT Negotiator
				Complement				

‘That means–there’s not much improvement?’

- 120 *hai6 aa3*
 right
 ‘Right,’
- 121 *gam2 gam2 ngo5 on1 paai4 nei5 jap6 jyun2 laa1 haa2?*
 aa4 dei6
 in that so 1-PL arrange 2-SG hospitalization PRT TAG
 case
 Subject Predicator Complement Negotiator
 ‘in that case, we’ll arrange your hospitalization, okay?’
- 122 *nei5 tung4 ji3 aa1 maa1, hai6 maa3?*
 2-SG agree PRT TAG
 Subject Predicator Negotiator
 ‘You agree, right?’
- 555 P: 123 *Okay*
 okay
 ‘Okay’

Example 6.19 illustrates the instance of **[non-assumptive; check]** question. Here, the doctor was checking if Billy felt better after taking the meds. Instead of giving a solid reply, Billy offered a rather ambiguous answer, as in ‘*gam2 gok3 soeng6*’ (‘*In terms of feeling...*’). The ambiguity in Billy’s response thus motivated the doctor to further confirm if his understanding of the message 118 was correct. Important in this validation is that it is attitudinally neutral. That is to say, the doctor possessed no built-in assumption as in the case of **[assumptive; check]** question; and he or she was merely validating what was perceived. The validation is thus lexicogrammatically realised by the lexical phrase ‘*zek1 hai6*’ (‘*that is*’ or ‘*that means*’ in English). Message 119 is thus analysed as **[non-assumptive; check]**, which semantically denotes a sense of checking through paraphrasing.

Example 6.20 Sean – Doctor dyad

Turn S Msg ID Messages

131	D:	92	<i>zik1 hai6</i>	<i>nei5</i>	<i>ni1 loeng5 go3</i>	<i>dou1 hai6</i>	[[93]]	<i>tung3</i>
			that means	2SG	this two weeks	still (emphasizer)		hurt
				Subject	Adjunct	Adjunct		Predicator
			‘That means, these two weeks it hurts you [[93]];					
		93	<i>juk1</i>	<i>go2 zan6;</i>				
			move	when				
			Predicator					
			‘when you move’					
		94	[[95]]	<i>zau6</i>	<i>(nei5)</i>	<i>mou5je5</i>	<i>ge3</i>	
				then	(2SG)	no problem	PRT	
					(you)	Predicator	Negotiator	
			‘ [[95]] you are fine’					
		95	<i>m4</i>	<i>juk1</i>	<i>go2 zan6</i>			
			not	move	when			
			NEG	Predicator				
			‘when you don't move’					
132	P:	96	<i>hai6</i>	<i>laa3</i>				
			yes	PRT				
			yes	Negotiator				
			‘Right’					

As seen in the above example, there are two questions in this exchange sequence, as in message 92 – 93 and message 94 – 95; each of which entails logical supplementation. Viewed from the co-text, the doctor was validating his understandings by summarising and rephrasing what he perceived from Sean. Given this orientation, the semantics of these two questions is analysed as **[non-assumptive; check]** – Sean’s doctor was merely validate if his understandings were right; he or she entailed on contradictory attitudes towards what he perceived. Although both questions select **[non-assumptive; check]**, subtle attitudinal differences exist. Attitudinally speaking, the former question suggests no specific attitude is embodied towards the paraphrasing, whereas the latter denotes a sense of assertion, as is

realised lexicogrammatically by the clause final particle ‘*ge3*’.

6.3.5.1.1.3.2 Semantic options [assumptive: invite: reason] vs. [non-assumptive: invite: reason]

As briefly introduced in Section 6.3.5.1.1.2.1, the semantic option **[reason]** concerns the meaning of ‘why’. A question selecting **[reason]** thus interrogates the listeners the reason in doing something. In the system of Cantonese, a **[reason]** question can be either **[non-assumptive]** and **[assumptive]**.

Semantically, a **[non-assumptive: reason]** question indicates that the enquirer has no built-in unvoiced assumption regarding the question; he or she is merely soliciting the reason for the state of affairs. Lexicogrammatically, it is realised in a number of ways, including:

- (i) wh-interrogative marker *dim3 gai13, wai3 mat1, jan1 mat1 si6, zou6 mat1* (see Tam, 2004; Matthews and Yip, 2011);
- (ii) clausal final particle *ge2* which probes for reason (see Kwok 1984; Leung, 2005; Matthews and Yip, 2011; Tang, 2008, 2015 and many others);
- (iii) combination of (i) and (ii), forming a ‘discontinuous structure’ (Tang, 2008).

Example 6.27*

Turn	S	Msg ID	Messages
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P	1	<i>ngo5</i> 1-SG Subject 'I don't wanna get hospitalised'	<i>m4</i> NEG	<i>soeng2</i> want Predicator	<i>jap6 jyun2</i> hospitalized	<i>aa3</i> PRT Negotiator
D	2	<i>dim3 gai3</i> wh-int:why Adjunct 'Why?'	<i>ge2</i> PRT Negotiator			
P	3	<i>jan1 wai4...</i> because Adjunct 'cause...'				

As indicated in Example, 6.27, message 2 is a 'why' question which are structured as a discontinuous structure in Cantonese. Semantically, the employments of interrogative marker '*dim3 gai3*' and clause final particle '*ge2*' in message 2 functions only to probe the reasons for not getting hospitalized, without entailing any built-in unvoiced assumption regarding the patient's refusal. Message 2 is thus interpreted as **[apprize: precise: invite; explain: reason; non-assumptive]**.

An **[assumptive: invite: reason]** question, by contrast, presents a rather different semantic phenomenon. Semantically, an **[assumptive: invite: reason]** question suggests the enquirer has entailed a presupposition towards the proposition. Recognising that it is contradictory to the true state of affairs, the enquirer asks for a reason of that. A question selecting the feature **[assumptive: invite: reason]** is thus attitudinally - marked – through soliciting the reason, the enquirer at the same time projects a sense of surprise or challenge to the listener regarding the true states of affairs. An **[assumptive: invite: reason]** question can thus be paraphrased as '*I am a bit amazed that the true states of affair is not what I has presumed. Please tell me the reason behind*'.

Lexicogrammatically, the assumptiveness in **[reason]** question is realised by the Cantonese adverb *mat1*. As Tang (2008) argues, the *mat1* here is NOT a reduced form of *zou6 mat1* as in **[non-assumptive: reason]** question but is more or less an adverb (cf. *how come* in English). The presence of *mat1* in a **[reason]** question not only indicates a sense of built-in assumption, but also creates a rhetorical effect of strong suspicious and challenging attitude towards the states of affair.

Example 6.28*

Turn S Msg ID Messages

1	D	1	<i>nei5</i> 2-SG Subject	<i>ho2 ji5</i> can	<i>ceot1</i> leave	<i>heoi3</i> to	<i>lyut3</i> take	<i>joek6</i> meds Predicator
			‘You can collect meds outside.’					
			(10 minutes later)					
2	D	2	<i>mat1</i> how come	<i>nei5</i> 2-SG Subject	<i>zung6</i> still Adjunct	<i>hai6</i> be Predicator	<i>dou3</i> here Adjunct	<i>ge2?</i> PRT: why
			‘Why haven’t you left?’					
		3	<i>nei5</i> 2-SG Subject	<i>zau2</i> leave Predicator	<i>dak1</i> verbal-suffix	<i>gaa3 laa1</i> PRT Negotiator	<i>wo3</i> PRT Negotiator	
			‘You can leave now’					
3	P	4	<i>ngo5</i> 1-SG Subject	<i>zung6</i> still Adjunct	<i>jau5</i> have Predicator	<i>je5</i> thing Complement	<i>soeng2</i> want	<i>man6</i> ask Predicator
			‘I still have a question’					

Example 6.28 is a constructed example of Dismissal phase – the final stage in a patient

journey. Given that the patient had been discharged officially, the presence of the patient after discharge was indeed contradictory to the emergency practices. Given this contradiction, it is reasonable to interpret that message 2 is assumptive, and more specifically, a semantic act asking for why the patient is still there. Message 2 is thus analysed as **[invite: explain: reason; assumptive]**.

6.3.5.1.1.3 Semantic options [unprompted] vs. [prompted]

In enacting **[apprize]** questions, the enquirer can further provoke the listener to answer the questions by employing question prompts. By ‘question prompts’, I refer it as an element located outside the constitutional configuration of a question. The employment of this post element in questioning is inherently interpersonal – whether the enquirer desires to prompt a particular kind of responses from the compliant listener. To capture this semantic phenomenon, *system q* introduces two semantic option viz., **[unprompted]** and **[prompted]**. This, together with *system e* (i.e. **[explain]** vs. **[specify]**), constitutes the basis of **[apprize]** questions in Cantonese⁹⁰.

The semantic option **[unprompted]** indicates that the enquirer has no attempt to provoke the listener to provide a particular answer. An **[unprompted]** question is thus semantically non-suggestive – the question is truly open in the sense that the enquirer is offered a freedom of choice in providing missing information regarding the message query point. Example 6.21 illustrates the instance of **[unprompted]**.

⁹⁰ Noted that a Cantonese message with a systemic history **[ask]** is excluded from the selection of **[prompted]** and **[unprompted]** simply because it is inherently unbiased. In this sense, it is quite clearly that the feature **[unprompted]** is less likely to associate with **[ask]**.

Example 6.21 John - Doctor dyad

Turn S Msg ID Messages

147	D:	21	<i>sam1 hau2</i> chest Subject 'How long has your chest felt queasy?'	<i>m4</i> NEG Predicator	<i>syu1 fuk6</i> uncomfortable	<i>zo2</i> ASP	<i>gei2 noi6</i> wh-int: temproal Adjunct	<i>aa3 ?</i> PRT Negotiator
148	P:	22	<i>mai6</i> exactly Adjunct 'Just a dozen days.'	<i>sap6</i> ten	<i>leng4</i> around Adjunct	<i>jat6</i> day	<i>ze1</i> PRT Negotiator	
149	D:	23	<i>sap6 gei2</i> over ten Adjunct 'over a dozen days?'	<i>jat6</i> day	<i>aa4</i> PRT Negotiator			
		24	<i>hou2</i> Right 'Right'					

As the above example shows, message 21 is an open-end question, soliciting the information about the duration of John's discomfort. Here, message 21 is simply unprompted – the doctor did not attach any question prompt to direct John to provide specific answer. Message 21 is thus analysed as **[apprize: specify: location: time; unprompted]**.

By contrast, the option **[prompted]** indicates that the enquirer's attempt in prompting the enquirer. Semantically, a **[prompted]** question is suggestive – by prompting the compliant with choices, the enquirer can direct the respondent to a particular way of thinking, or more precisely, to guide him or her to provide a desired answer (cf. leading questions or suggestive questions in the literature). For illustration, let me turn to Example 6.22.

Example 6.22 Sam - Doctor dyad

Turn S Msg ID Messages

227	D:	43	<i>== daan6 hai6</i> but	<i>ji4 gaa1</i> now Adjunct	<i>jau5 mou5</i> have-NEG-have	<i>m4</i> NEG	<i>syu1 fuk6</i> comfortable	<i>sin1 ?</i> PRT Negotiator
‘==But do you feel unwell?’								
228	P:	44	<i>gam2 e6...</i> well	<i>kam4 jat6</i> yesterday Adjunct	<i>ne1</i> PRT	<i>jau6</i> also	<i>gok3 dak1 ...</i> feel Predicator	
‘Well ah... yesterday I felt...’								
			<i>m4</i> NEG	<i>hai6</i> BE	<i>gei2</i> quit Predicator	<i>syu1 fuk6</i> comfortable	<i>aa3 °</i> PRT Negotiator	
‘I didn’t feel quite well’								
229	D:	45	<i>dim2 joeng2</i> wh-int: manner Adjunct	<i>m4</i> NEG	<i>syu1 fuk6</i> comfortable Predicator	<i>aa3?</i> PRT Negotiator	<i>tung3</i> ache Adjunct	<i>aa4?</i> PRT Negotiator
‘How does it make you unwell? It aches?’								
230	P:	46	<i>jau5</i> have	<i>di1</i> a bit	<i>tung3 tung3 dei2</i> hurting Predicator	<i>gam2</i> like	<i>aa3...</i> PRT Negotiator	
‘It hurts a bit...’								

Example 6.22 is an extract of history-taking phase of Sam, where the doctor was asking him if he felt uncomfortable after he felt down and hit himself. In so doing, the doctor enacted an apprise question, as in message 29. Important in it is that it is prompted – the doctor was, indeed, directing Sam from the general discomfort to one specific instance *viz.*, aching, as in ‘*tung aa4*’ (‘it aches?’). The employment of question prompt here thus exercises a kind of ‘semantic control’ on Sam. Message 29 is thus analysed as [**apprize: specify: scope: manner; prompted**].

6.3.5.1.1.4 Semantic options [*simple*] vs. [*alternative*]

In the system of Cantonese, a question can be construed as a straight question or a choice question. To capture this semantic distinction, *system r* differentiates two semantic options, namely [**alternative**] and [**simple**].

As their names indicate, the semantic option [**alternative**] denotes the meaning of choice selection. An [**alternative**] question thus provides two or more choices to the listener to make a selection. *Contra* [**alternative**], the option [**simple**] indicates that the question entails no selection of choice. A [**simple**] question is thus a straight question – the listener is expected to provide a response regarding the query point of the question.

It should be emphasized that not all Cantonese questions could enter *system l*, selecting further meaning option [**alternative**]; it is only questions with a systemic history [**non-assumptive**] or [**prompted**] which are capable in doing so. This disjunctive entry condition thus yields two types of alternative questions in the system of Cantonese, namely [**non-assumptive: check: alternative**] and [**apprize: prompted: alternative**]. Important in these questions is that not only do they represent two different loci of choices (i.e. either in (i) the question *per se* or (ii) the question prompts), but also indicate the different semantic effects of [**alternative**] within the question.

A [**non-assumptive: check: alternative**] question is that the point of selection conflates with the question's query point. Important in this conflation is that the feature [**alternative**] is semantically-central: it exerts the meaning of 'choice' directly on the question itself, forming a

specific type of question in the system of Cantonese *viz.*, choice question (*a.k.a.* ‘disjunctive question’ or ‘alternative question’ in literature). In this question, the query point goes beyond the truth-false condition of ‘yes’ or ‘no’, but to the selection of choices that are set up by the enquirer. Lexicogrammatically, such choices are subsequently realised by a clause complex, or more precisely, a combination of two or more clause simplexes preselecting an explicit coordinating conjunction such as *jik1 waak6* and *ding6 hai6* (literally as ‘or’ in English) or an implicit one, coordinating two or more clause simplexes through zero coordinator⁹¹ (see Wu, 1990, p. 47; see also Wu, 1996). For illustration, let me turn to Example 6.23.

Example 6.23 Paul - Doctor dyad

Turn S Msg ID Messages

101	D:	82	<i>nei5</i> 2-SG Subject <i>‘What do you plan to do?’</i>	<i>soeng2</i> want Modal adjunct	<i>dim2</i> wh-int: how Adjunct	<i>zou6</i> do Predicator	
			<i>soeng2 jiu3</i> want Predicate <i>‘Do you need a sick leave certificate or what?’</i>	<i>gaa3 zi2</i> sick leave certificate Complement	<i>ding6</i> or	<i>hai6</i> be Predicator	<i>dim2 joeng2</i> what Complement
102	P:	83	<i>hai6</i> yes	<i>jiu3</i> want Predicator	<i>gaa2 zi2</i> sick leave certificate Complement <i>‘Yes, I’d like a sick leave certificate.’</i>		

Example 6.23 is an extract of treatment negotiation – the final phase of the patient journey in the emergency department. As seen in message 82, Paul’s doctor was rounding off the medical consultation by delivering his diagnosis. Instead of enacting an **[ask]** question ‘*yi2 m4 yiu2 gaa3 zi2*’ (*‘Do you need sick leave certificate?’*) or an **[apprize]** question as in ‘*nei5 soeng2*

⁹¹ Wu (1990, p. 49) argues that the zero coordinator is at best described as a deletion from the surface structure since they are ‘optional deletable’ in the system of Cantonese.

dim2 zou6 ('What do you plan to do?'), the doctor produced a 'choice question', selecting the semantic options [**non-assumptive: check: alternative**]. Important in the selection of [**alternative**] is that it reflects the doctor's recognition of patient autonomy - patients are treated as humans who enjoy the rights to make decision about their medical care. By construing a 'choice question' in Paul's treatment negotiation phase, the doctor, indeed, showed his respect of Paul, giving him space to take part in his medical decision.

An [**apprize: prompted: alternative**] question, by contrast, denotes a rather distinctive semantic phenomenon. Here, the point of selection disassociates from the query point of the question and is located only in the question prompts. Central to this disassociation is that the meaning of [**alternative**] becomes peripheral. That is to say, the meaning of 'choice' does not contribute to the formation of a choice question. Rather, it only acts on the question prompts, signaling the enquirer's attempt in further guiding the listener to supply a desired answer. In this sense, an [**apprize: prompted: alternative**] question is still an [**apprize**] question – it is NOT the choice of question prompts but a response relevant to [**apprize**] which serves as an adequate answer. To illustrate, let me turn to Example 6.24.

Example 6.24 Billy - Doctor dyad

Turn S Msg ID Messages

155	D:	75	<i>haa2 ?</i> huh	<i>soeng6 ci3</i> last time Subject	<i>dou1</i> all Adjunct	<i>hai6</i> be Predicator	<i>gam2 joeng2?</i> like that Complement		
‘Huh? It was the same last time?’									
156	P:	76	<i>aa3</i> PRT	<i>soeng6 ci3</i> last time Adjunct	<i>ne1</i> PRT	<i>go3 tau4</i> The head Subject	<i>zau6</i> then	<i>mou5</i> NEG	<i>wan4</i> dizzy Predicator

‘Last time I didn’t feel dizzy;’

77 *gam1 ci3* *go3 tau4* *zau6==* *hou2 ci5*
 this time the head then seems
 Adjunct Subject Predicator
 ‘this time my head==seems’

78 *== gam2* *gaa2 jyu4* *go3* *tung3 faat3* *ne1 ?*
 so if the type of pain PRT
 Complement
 ‘Then how about, say, the way it hurts?’

soeng6 *tung3* *di1* *ding6* *gam1 ci3* *tung3* *di1* *aa3*
ci3
 last time hurt more or this time hurt more PRT
 Adjunct Predicator Adjunct Adjunct Predicator Adjunct Negotiator
 it hurt more last time , or this time?’

158 P 79 *gam1 ci3* *tung3* *di1 °*
 this time hurt more
 Predicator Adjunct
 ‘It hurts more this time.’

Example 6.24 is a short extract of the history-taking phase of Billy, who suffered from chest pain and was suspected to have coronary artery disease. Given that Billy had a history of tight chest, he expressed that the chest pain that he suffered this time made him dizzy. Recognizing that Billy’s condition had worsened this time, the doctor construed an **[apprize]** question, soliciting the types of pain he was experiencing, as in message 78. Important in this elliptical apprize question is that it is semantically prompted, and more precisely, the question prompt entails a selection of choice. In this sense, the doctor’s question here exhibits a sense of semantic extension – while the query point of message 77 stills lies in solicitation of the type of pain, the focus of the question is directed to the choice selection of the question prompt. Such a semantic extension is semantically-functional – it enables the doctor to exercise control over the negotiation by narrowing down the interrogative focus. As seen in Billy’s response, while he enjoys the freedom of choice in specifying the type of pains, he, indeed, follows the

guidance of the doctor by picking of the choices as his answer. Message 78 is thus analysed as [apprize: precise; invite; specify: scope: nucleus: complement: non-specific: prompted: alternative].

6.3.5.1.1.5 A brief note on semantic options [congruent] vs. [incongruent]

In a SFL sense, Cantonese questions entail both congruent and incongruent realisation in the lexicogrammatical stratum. To capture the congruency in questioning, *system o* introduces two contrastive semantic options, namely [congruent] and [incongruent] – the former suggests that the question is *congruently* realised as [interrogative] whereas the latter is realised *incongruently* as mood type other than interrogative.

Semantically, the option [congruent] marks an ‘unmarked’ case of questioning. That is to say, this unmarked questioning is the most typical way in enacting a question in the system of Cantonese. In a semantic sense, a question selecting [congruent] indicates that the enquirer and the listener stand in a more or less ‘neutral’, if not reciprocal relation. That is, even though the listener is expected to provide as answer regarding the question, he or she is, indeed, offered the freedom of choice in answering or evading the question.

By contrast, the option [incongruent] denotes a ‘marked’ case of questioning in Cantonese. Semantically, this marked questioning serves ‘specific interactional purposes’ in the dialogical exchange (Thompson and Muntigl, 2008, p. 109) – whether it highlights the enquirer’s attitude regarding the question; establishes politeness in questioning (cf. indirect speech acts in Searle, 1975) or exerts rhetorical effect in scaling up and down the degree of interrogativity. For

example, a **[request]** question (i.e. an **[incongruent]** question which is realised lexicogrammatically as imperative) not only fringes the tenor relation by making no attempt at mitigating the imposition (cf. bald-on-record strategy in Brown and Levinson, 1987) but also exerts a high degree of interrogativity towards the compliant listener. In a semantic sense, the respondent is ‘directed’ to provide an **[adequate]** answer to the question; and an evasion of questions will appear awkward in the on-going dialogic exchange (see Section 6.3.5.1.2.3.1 for a detailed discussion).

Table 6.9 Tentative lexicogrammatical realisations of meaning options of QUESTION (Fragment E)

SEMANTIC OPTION		CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1	[confirm]	(i) major: indicative (ii) query point conflates with polarity
a2	[apprize]	(i) major: indicative (ii) query point conflates with element other than polarity
PART A: semantic option of asking yes-no-question		
		<i>Type 1</i> (i) insert Negotiator, (ii) Negotiator: interrogative marker (ii) preselect <i>A-not-A</i> interrogative marker, (iii) <i>A</i> conflates with Predicate
b1	[ask]	<i>Type 2</i> (i) insert question/interrogative particle (ii) Negotiator preselect <i>maa3</i> (iii) $P \wedge maa3 \wedge \#$ <i>Type 3</i> (i) insert negator (ii) preselect <i>mei6</i> (iii) $P \wedge negator \wedge \#$
b2	[validate]	as c1 and c2
c1	[verify]	(i) insert Negotiator (ii) preselect particles <i>ho2</i> and <i>ha2</i> OR question tags such as, <i>hai5-maa3</i> and <i>hai5-mai2</i>
c2:o1	[check: assumptive]	<i>Type 1</i> (i) insert segmental assumptive particle (ii) preselect <i>me1</i> , <i>aa4</i> or <i>gaa4</i> (iii) $P \wedge particle \wedge \#$
		<i>Type 2</i> (i) insert non-segmental assumptive particle (ii) declarative + final rising tone $\wedge \#$
c2:o2	[check: nonassumptive]	<i>Type 1</i> (i) insert lexical phrase (ii) select <i>zik1 hai6</i> (iii) $\# \wedge zik1 hai6 \wedge P$

Type 2

- (i) insert clause final particle
- (ii) preselect *le3*
- (iii) $P \wedge \text{particle} \wedge \#$

PART B: semantic options of asking content question

d1	[vague]	<ul style="list-style-type: none"> (i) major: indicative: declarative (ii) insert element Mood (iii) expand Mood as Subject \wedge Predicate (iv) Predicate conflates with Relational Process e.g. <i>hai2</i> (v) outclassifies wh-interrogative marker and mood particle
e2	[precise]	<ul style="list-style-type: none"> (i) major: indicative (ii) insert element Mood
g1	[invite]	<ul style="list-style-type: none"> (i) expand Mood as wh-interrogative (ii) insert open-interrogative marker OR mood particle
g2	[request]	(i) expand Mood as imperative $\#(S) \wedge P$

PART B1: semantic options of asking [congruent] content question (i.e. QUESTION wh-interrogative)**B1a: Options pertaining to *explanation-type* questions**

e1; g1	[invite; explain]	see i1:p1 and i1:p2
--------	-------------------	---------------------

Type 1

- (i) insert adverb and open-interrogative/wh-marker
- (ii) adverb preselects *mat1*;
open-interrogative marker preselects *dim2 gai2*
- (iii) $mat1 \wedge dim2 \wedge gai2 \wedge P \wedge \#$

i1:p1 [reason: assumptive]

Type 2

- (i) insert adverb and clause final particle
- (ii) adverb preselects *mat1*;
clause final particle preselects *ge3*
- (iii) $mat1 \wedge P \wedge ge3 \wedge \#$

Type 3

combination of (1) and (2) as discontinuous structure

i1:p2

[reason: non-
assumptive]**Type 1**

- (i) insert open-interrogative/wh-marker
- (ii) preselect wh-marker e.g. *dim2 gai2, wai3 mat1, jan1 mat1 si6, zou6 mat1 etc*
- (iii) conflate with Adjunct

Type 2

- (i) insert clause final particle
- (ii) preselect *ge2*
- (iii) P ^ particle ^ #

Type 3

combination of (1) and (2) as discontinuous structure

- (i) insert open-interrogative/wh-marker
- (ii) preselect wh-marker e.g. *dim2, dim2 joeng6 + verb*
- (iii) conflate with Adjunct

i2	[method]	
B1a: Options pertaining to <i>specification-type</i> questions		
e2; g1	[invite; specify]	see j1 and j2
j1	[scope]	as in k1 and k2
k1	[duration]	as in l1 and l2
k2	[manner]	<ul style="list-style-type: none"> (i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>dim2, dim2 joeng6</i> (iii) conflate with Adjunct
l1	[extent]	<ul style="list-style-type: none"> (i) insert open-interrogative/wh-marker (ii) preselect wh-marker <i>gei2 + adj./adv, gei2 doh1 + thing etc</i> (iii) conflate with Adjunct
l2	[location]	as in m1 and m2
m1	[time]	<ul style="list-style-type: none"> (i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>gei2 dim2, gei2 si4</i> (iii) conflate with Adjunct
m2	[place]	<ul style="list-style-type: none"> (i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>bin1 do5, bin1 syu2</i> (iii) conflate with Adjunct
j2	[nucleus]	(i) insert open-interrogative/wh-marker
n1	[subject]	open-interrogative/wh-marker conflates with Subject
n2	[complement]	open-interrogative/wh-marker conflates with Complement
o1	[specific]	preselect wh-marker e.g. <i>bin1 yat1 / bin1 di1 + Thing</i>
	[non-specific]	preselect wh-marker e.g. <i>bin1 go3, mat je5</i>

PART B2: semantic options of asking [incongruent] content question (i.e. QUESTION imperative)		
B2a: Options pertaining to <i>explanation-type</i> questions		
e1; g2	[request; explain]	(i) major: indicative : imperative (ii) insert Predicate (iii) Predicate conflates with Verbal Process e.g. <i>gong2, wa6</i> (iv) enquiry point re-construed as through ideational metaphor, preselecting lexical phrase of <i>explanation-type</i> as Complement
i1	[reason]	Complement realised lexically as <i>jyun4 jan1</i>
i2	[method]	Complement realised lexically as <i>fong1 faat3, baan6 faat3</i>
B2b: Options pertaining to <i>specification-type</i> questions		
e1; g2	[request; specify]	(i) major: indicative : imperative (ii) insert Predicate (iii) Predicate conflates with Verbal Process e.g. <i>gong2, wa6</i> (iv) enquiry point re-construed as through ideational metaphor, preselecting lexical phrase of <i>explain-type</i> as Complement
j1	[scope]	see k1 and k2
k1	[duration]	as in l1 and l2
l1	[extent]	Complement realised lexically as <i>cing4 dou6</i>
l2	[location]	as in m1 and m2
m1	[time]	Complement realised lexically as <i>si4 gaan1</i>
m2	[place]	Complement realised lexically as <i>dei6 fong1</i>
PART C: semantic options pertaining to PROMPTING and ASSUMPTIVENESS		
q1	[prompted]	preselect question prompt
q2	[unprompted]	outclassify question prompt
r1	[alternative]	preselect EITEHR (i) explicit coordinating conjunction <i>jik1 waak6</i> or <i>ding6 hai6</i> (ii) implicit coordinating conjunction
r2	[simple]	outclassify both explicit and implicit coordinating conjunction
s1	[congruent]	Realising clause preselects [<i>interrogative</i>] clause
s2	[incongruent]	Realising clause outclassifies [<i>interrogative</i>] clause

Note:

- (1) The selection expression [**vague: complement: specific: unprompted**] constitutes the defaulted

- dependency.
- (2) A non-recursive specification question through COMMAND select [**request; specify: complement: specific**] as default dependency.
 - (3) If the meaning options [**request; specify: scope**] are selected, it appears that the option under system k must select [**duration**] as default dependency.

6.3.5.1.2 Systems of STATEMENT

Having discussed the semantic systems of QUESTION in Cantonese, this section focuses on the systems of ANSWER. Linguistically speaking, questions and responses are ‘the standard pattern in language’ (Halliday and Hasan, 1976, p. 206). That is to say, in normal situation, the acting of questioning ‘creates a textual environment with the expectation that the addressee will respond’ (Hasan, 2009i [1989], p. 212). In this sense, questions and responses are closely associated, constituting the basis of an exchange of proposition, or in Sacks’ term, an ‘adjacency pair’ in Conversation Analysis (CA). Theoretically, if the expectation is satisfied, an answer comes after a question. However, it should be emphasised that in actual dialogical exchange, that a question has been asked is no guarantee that it will also receive an answer – it can be inadequate, delayed, evaded or even disclaimed (Halliday and Hasan, 1976, p. 206). Just as questions can be distinguished from each other in terms of semantic options, so can answers. To capture the semantic landscape of answers, it appears necessary to describe the notion of answers in terms of the message semantic system network.

Answer in this study is conceptualised in a message semantic sense, and is represented in the form of semantic system network, following Hasan (2009g [1991]) and Williams (1995). Important in this approach is that an answer is not just a mere linguistic entity following a question; it is, in essence, an instantiation of features within a semantic system network. More specifically, it is inherently semantic. It is exactly the selection of various semantic attributes available in the network which contribute to our understanding of how one answer is distinct from another, and more specifically, how these various selections reflect different interpersonal meanings in discourse.

In understanding the semantics of ‘answer’, one needs to distinguish it from its near-synonyms such as ‘response’ and ‘reply’. In a message semantic sense, these three terms are inter-related, but are inherently different. The following sections will start with a discussion of the conceptualisation of response, followed by reply and answer. Figure 6.9 presents a tentative system network of STATEMENT in Cantonese (e.g. Halliday and Hasan, 1976, Hasan, 2009 [1990], Hasan 2009g [1991], Williams, 1995)⁹².

⁹² This tentative semantic network of statement is a modified version of Hasan’s summary chart of statement, which appeared in Hasan (1968). However, given the failure in accessing her manuscripts, the discussion of system network of STATEMENT is my own interpretation of her existing writings. Any errors and misinterpretation remain mine.

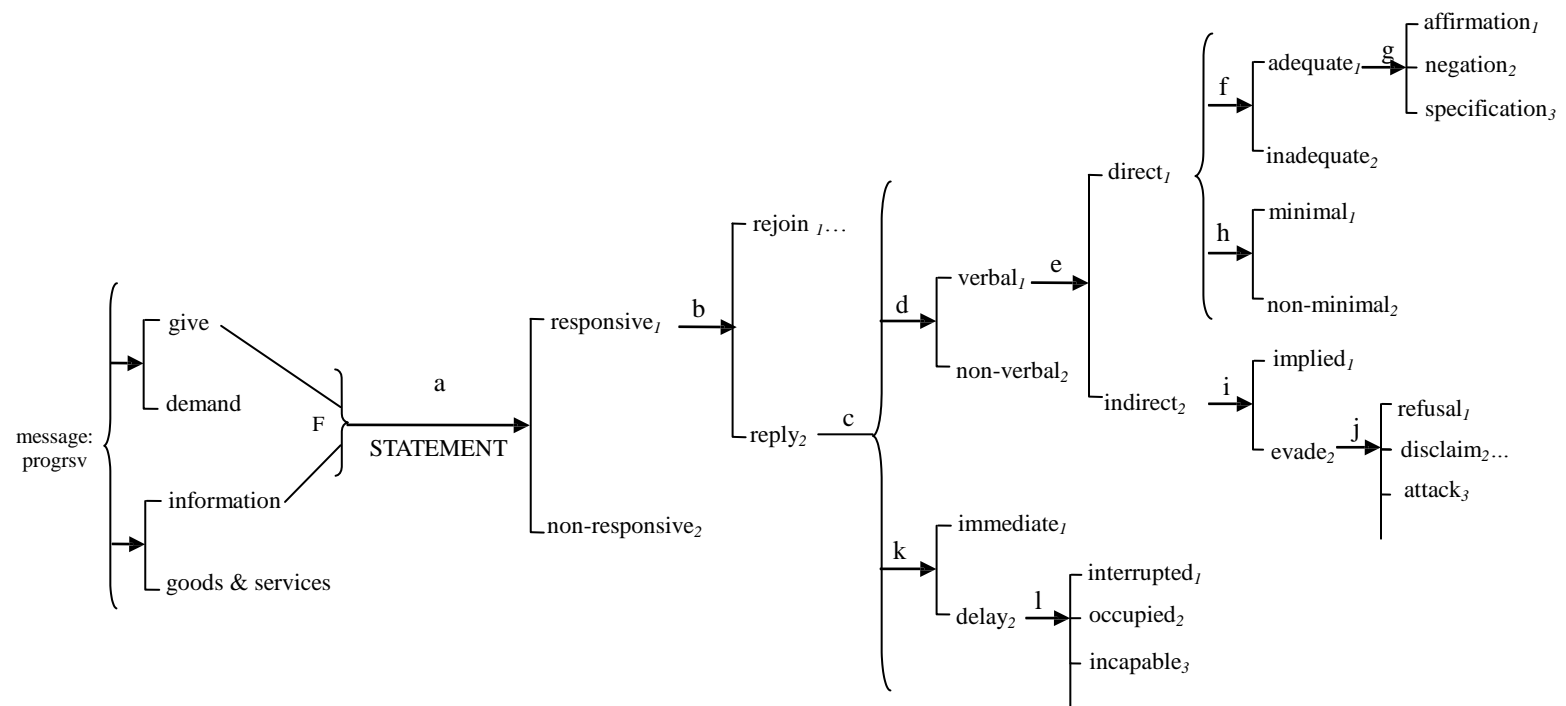


Figure 6.9 A tentative semantic network in giving statement in Cantonese (Fragment F)

6.3.5.1.2.1 Semantic options [responsive] vs. [non-responsive], and [rejoin] vs. [reply]

As represented in Figure 6.8, the system of ANSWER is organised under the system of RELATION ENACTMENT, cross-cutting the semantic option **[give]** and **[information]**. This cross-intersection serves as the entry condition to the semantic system network of STATEMENT. Semantically, a message functioning as a statement is either **[responsive]** or **[non-responsive]**, referring the distinction of a dialogicality of the linguistic activity. The semantic option **[responsive]** suggests that the languaging activity is dialogic - there are at least two active interactants in the linguistic activity (Turner and Mohan, 1970, p. 26). More specifically, the message under focus shows 'varying degree of relevance' to the preceding message (Hasan, 2009i [1989], p. 214). A **[responsive]** statement thus includes the all responsive relations – whether the message is responding to a question, a statement or a command.

In contrast, the semantic option **[non-responsive]** indicates two semantic orientations: either (i) the linguistic activity is monologic – there is only one participant and he or she is the narrator, or (ii) the languaging activity is dialogic – the activity entails two or more participants, and the message under focused makes no reference to the immediately preceding one of another participant (Turner and Mohan, 1970, p. 26). In other words, a **[non-responsive]** message exhibits no linguistic connection, outclassifying any cohesive ties with the preceding one.

Given that a **[responsive]** statement is cohesively related to the preceding message irrespective of its speech function, it follows that one needs to further distinguish the responsive relations. To capture the diversity of responsive relations, two semantic options are introduced (i.e.

system b), namely **[rejoin]** and **[reply]**. The semantic option **[reply]** suggests that the statement under focus is cohesively related to a preceding question. Semantically, question and reply constitute a question-reply adjacency pair in discourse in the sense that the reply of a given question ‘may be predicted by making reference to the feature to the question’ (Turner and Mohan, 1970, p. 26). The semantic option **[rejoin]**, by contrast, refers to all other remaining responsive relations – whether the statement follows a statement or a command⁹³. In other words, the responding relations exhibited by **[rejoin]** are neither limited nor always predictable. In short, it is only message selecting the feature **[responsive: reply]** which is regarded as an ANSWER to question.

6.3.5.1.2.2 Semantic options [reply] and its sub-options

Having defined what an answer is conceptualised in a message semantic sense, one can further distinguish its delicate meanings in terms of semantic attributes. As presented in Figure 6.9, the semantic option **[reply]** serves as the entry condition to *system c*, entailing two simultaneous dependent systems *viz.*, *system d* and *system k*.

System d concerns the presentation mode of a reply. Generally speaking, a reply can be either **[verbal]** or **[non-verbal]** – the former denotes that the response is verbal whereas the latter is a non-verbal one, including gestures and facial expressions. Semantically, it is only a verbal reply which enjoys a full-fledged semantic potential – it is metafunctionally regulated and can be further distinguished into more delicate meaning options.

⁹³ Since it is beyond the scope on this current study, the semantic option **[rejoin]** will not be further developed.

System k, by contrast, concerns the connectedness of the question-reply sequence. As aforementioned, question and reply are standard patterns across languages – a question comes first and is followed by a reply. While it may be true that most questions are ‘paired’ with a reply, the reply does not always occur in the next speaker’s turn as expected - it can be delayed in discourse. To capture this linguistic phenomenon, *system k* introduces two meaning options, viz., **[immediate]** and **[delayed]** – the former denotes that the reply comes right after the question, whereas the latter indicates a delayed reply. The selection of **[immediate]** or **[delayed]** is interpersonally-motivated – it signals the tenor relation between the enquirer and the compliant listener. Semantically, an **[immediate]** reply suggests a sense of conversational cooperation – the enquirer seeks information and the give a reply right after the question, thereby achieving mutual conversational ends.

A **[delayed]** reply, by contrast, leads us to a different meaning interpretation. In a semantic sense, a delayed reply is meaningful in discourse because that it marks the un-cooperativeness in the conversation – whether it is **[interrupted]** (i.e. a verbal interruption by another participant), or **[occupied]** (i.e. an absence of reasonable chance for the listener to respond since the floor is occupied by the enquirer)⁹⁴ or **[incapable]** (i.e. the listener is too sick and incapable to make a immediate reply), to name but a few.

⁹⁴ As explained in Hasan (2009g [1991], p. 252), the absence of opportunity in giving a reply is not infrequent in dialogical exchange. One typical example is that the persona ‘finds’ the answer in the course of asking the question. Under this circumstance, the addressee is often deprived of opportunities for reply.

Example 6.25 Crystal – Doctor dyad

Turn S Msg ID Messages

179	D:	46	<i>sau2 goek3</i> limbs Subject 'Anything uncomfortable with your limbs?'	<i>jau5 mou5</i> have-NEG-have Predicator	<i>m4 syu1 fuk6?</i> uncomfortable Complement
		47	<i>jau5 mou5</i> have-NEG Predicator 'Does one of your arms feel limp?'	<i>waa6</i> COMP Complement	<i>[[jat1 bin1 sau2 mou5 lik6?]]</i> one side hand limp
180	P:	48	<i>mou5</i> NEG-have Predicator 'No.'		

Example 6.25 exemplifies the instance of **[occupied]**. Here, the doctor enacted the first **[ask]** question as in message 46. Interestingly, rather than giving the floor to Crystal to reply, the doctor immediately enacted another **[ask]** question, concerning particularly if Crystal felt limping on one side. The answer given by Crystal in message 48 is thus delayed since there is a lack of reasonable chance for Crystal to make a response.

Example 6.26 Kelvin - Doctor dyad

Turn S Msg ID Messages

71	D:	134	<i>wai3,</i> hey Subject 'Hey, how many times did you take the meds?'	<i>nei5</i> 2-SG Predicator	<i>sik6</i> eat ASP	<i>zo2</i> ASP Adjunct	<i>gei2 do1 ci3</i> Wh-int: extent Negotiator	<i>aa1</i> PRT Negotiator	<i>ni1 di1?</i> this Complement
72	S:	135	<i>nei4 di1</i> this Subject 'These meds==he didn't take them.'	<i>joek6</i> pills Predicator	<i>==zau6</i> then Negotiator	<i>mou5</i> NEG Predicator	<i>sik6</i> eat ASP	<i>gwo3</i> ASP Complement	

73 P: 136 ==*jat1 ci3*
 once
 Adjunct
 ‘==Once.’

As seen in Example 6.26, the doctor enacted an open-end question, selecting the features **[apprize: precise: specify; invite; unprompted: scope: extent: simple]**. Such a question, however, does not receive an immediate response. Semantically, the reply is interrupted by his Kelvin’s son. Message 136 is thus interpreted as **[delayed: interrupted]**.

Example 6.27*

Turn S Msg ID Messages

D: 1 *ji5 cin4 jau5 mou5 me1 beng6 tung3*
 before have NEG any illness
 Adjunct Predicator Complement
 ‘Did you have any illnesses before?’

P: 2 (*Coughing*)

D: 3 *maan6 maan2 lei4 maan6 maan2 lei4*
 take it easy take it easy
 Predicator Predicator
 ‘Take it easy, take it easy’

P: 4 *mou5 gaa3*
 NEG-have PRT
 Predicator
 ‘No.’

Example 6.27 is a constructed instance illustrating the option **[incapable]**. As seen in the extract, the patient delayed his response due to his physical condition. The reply made in message 4 is thus analysed **[delayed: incapable]**.

As indicated in the above examples, a **[delayed]** reply in dialogic exchange is important and needs further examination as it, in Hasan's (2009g [1991], p. 253) words, 'takes the discourse in some other directions'.

6.3.5.1.2.3 Semantic options [direct]

As discussed, it is only the option **[verbal]** which enjoys a full semantic potential and is further classified in this study. A **[verbal]** response can be either **[direct]** or **[indirect]** - the former denotes that the reply supplies a piece of information which is sufficient to fulfill the query point explicitly whereas the latter does not. In a semantic sense, a **[direct]** reply is thus an ANSWER, or more specifically, an 'attempt to provide a response that in the respondents' view meets the enquirer's specific needs' (Hasan, 2009l [1990], p. 103). A **[direct]** reply, or more precisely, an answer, can be distinguished in terms of two semantic dimensions, *viz.*, ADEQUACY and CONCISENESS, as in *system f* and *system h* respectively.

6.3.5.1.2.3.1 Semantic options [adequate] vs. [inadequate]

Regarding the semantic dimension of ADEQUACY, *system f* entails two semantic options, namely **[adequate]** and **[inadequate]**. The distinction between these two options, as Hasan (2009l [1991], p. 254) notes, is semantically-motivated – it lies not in the 'objective nature of the world or by any consideration of truth' but whether or not the answer could address the query point of a question. In other words, it is the 'idea of the point of a question' which serves as the foundation of the system of adequacy, enabling us to understand the semantics of answering from the perspective of the enquirer (Hasan, 2009l [1990], p. 103). An answer selecting the feature **[adequate]** thus suggests that the information supplied by the listener is

sufficient to be treated as a possible answer of the question, whereas an answer selecting **[inadequate]** means that the reply is ‘cognisant of the query point but speaker give no information that can be counted as answer’ (Hasan, 2009g [1991], p. 251).

An **[adequate]** answer is semantically significant – it signals that the listener has recognised the query point of the questions, and supplied an answer which, in his or her view, is sufficient to meet the enquirer’s specific need. Based on the semantic nature of the adequacy, an **[adequate]** answer can be further sub-divided into **[affirmation]**, **[negation]**, and **[specification]**. As their names indicate, these delicate options correspond to the question type discussed in Section 6.3.5.1.1. The semantic option **[affirmation]** and **[negation]** correspond to *yes-no* question and the information being supplied explicitly contains words expressing the positive polarity (e.g. *hai6* ‘yes’) or negative polarity (e.g. *m4-hai6*, ‘no’) (Hasan, 2009g [1991], p. 254). An answer selecting the feature **[affirmation]** thus means ‘the answer is positive’, whereas a **[negation]** one means ‘the answer is negative’. The contrast is through messages in Example 6.27 to 6.28.

Example 6.27 Ada - Doctor dyad

Turn S Msg ID Messages

14	D:	23	<i>==maan5 faan6</i> dinner	<i>cin4</i> before Adjunct	<i>dou1</i> all	<i>mou5</i> NEG-have Predicator	<i>si6</i> happen	<i>ge3</i> PRT Negotiator
			‘Nothing happened before dinner?’					
15	P:	24	<i>mou5</i> NEG-have Predicator	<i>si6</i> happen				
			‘Nothing happened’					

As illustrated in Example 6.27, message 24 selects [**adequate: affirmation**]. Semantically, the answer is sufficient to address the query point of the preceding yes-no question, and suggests a sense of confirmation.

Example 6.28 Crystal - Doctor dyad

Turn S Msg ID Messages

169	D:	28	<i>jau5 mou5</i> have-NEG-have	<i>au2</i> vomit Predicator	<i>dou3</i> verbal-suffix	<i>gam2 joeng2</i> in this way	<i>aal?</i> PRT Negotiator
			Did you vomit or something?’				
170	P:	29	<i>e6</i> , Ah	<i>mei6 jau5</i> NEG-have: perfective Predicator	<i>au2</i> vomit		
			‘Ah, not yet’				

Message 29 in Example 6.28 selects the meaning option [**adequate: negation**]. Semantically, negative response enacted by Crystal is sufficient to meet the query point of the preceding yes-no question.

Example 6.29 Ada - Doctor dyad

Turn S Msg ID Messages

95	D:	74	<i>daan6 hai6</i> but	<i>[[nei5</i> 2-SG	<i>hoi1 tau4</i> initially	<i>gok3 dak1</i> feel	<i>go3</i> the	<i>tung3]]</i> pain
			‘But, the pain that you feel initially					Subject
			<i>hai6 mai6</i> be-NEG-be Predicator	<i>[[hou2 ci5</i> seems like Complement	<i>waa6</i>	<i>laa2 sat6</i> tightened	<i>zo2</i> ASP	<i>jat1 zan6]]</i> a while
			is something like it tightened for a while?’					
		75	<i>==gan1 zyu6</i> and then	<i>laa3</i> PRT				

Example 6.30 Sean - Doctor dyad

Turn S Msg ID Messages

105	D:	49	<i>aa3 keoi5 waa6 nei5 (hai5) me1 si6 aa3 ?</i>
			Er... 3-SG say 2-SG be Wh-int: what PRT
			Subject Predicate Subject Predicate Complement Negotiator
			‘Ah, did they say what was the matter with you?’
106	P:	50	<i>Er sam1 gei1 fei4 daai6</i>
			<i>hypertrophic cardiomyopathy</i>
			Complement
			‘Hypertrophic cardiomyopathy.’

Here, the answer provided by Sean is adequate in the sense that his specification ‘*sam1 gei1 fei4 daai6*’ (‘*hypertrophic cardiomyopathy*’) is sufficient to address the query point of the preceding question as in message 49. Message 50 thus selects [**adequate: specification**].

6.3.5.1.2.3.2 Semantic options [*minimal*] vs. [*non-minimal*]

In addition to a question’s query point, the semantics of an answer can also be described from the perspective of the compliant listeners. As Hasan (2009) [1990], p. 103) writes,

If an answer is an attempt to provide a response that in the respondent’s view meets the enquirer’s specific need, then elaborated and unelaborated answers display two different estimates of the enquirer’s needs. So far as the speakers in a natural dialogic are concerned, in providing elaborated answers, *they are not providing information that is ‘optional extra’* – at least in their own view. Equally, if they do not elaborate, they are not withholding information that they consider essential to the on-going discourse. Rather, through the semantic features of answers, *they are indicating what they themselves understood to be the point of the question, and how much information would be enough* (emphasis mine).

As pointed out in the above quote, giving an answer is not a mere act which fulfills the query point of a question; it is also a locus of giving essential information in a dialogic exchange so as to contribute the conversational needs. From the perspective of respondents, what constitutes as an answer point resides in the semantic estimation of the enquirer's need, or more specifically, what the listener perceives as significant and adequate. The respondent's semantic calculation may thus extend beyond the query point of a question – it is semantically elaborated, covering some 'optional extra' which the respondent perceives as significant. To capture how the listener perceives the answers, *system h* sub-divides an answer into two semantic options, namely **[minimal]** and **[non-minimal]**.

The semantic option **[minimal]** indicates that the answer, in the respondent's view, is sufficient enough to reach the query point without providing information that has not been sought. In the sense of pragmatics, a **[non-minimal]** answer violate the Grice's (1975) Maxim of Quantity, in which more than enough information is provided by the listener. In other words, the information given, from the listener's view, is considered as essential to the on-going discourse in the sense that he or she 'could not have said less than this without appearing to ignore the enquirer's question (Hasan, 2009l [1990], p. 102). An answer selecting **[minimal]** is thus semantically-unelaborated – the listener only 'provides the barest amount of information that is necessary and sufficient to be treated as a possible answer' (Hasan, 2009l [1990], p. 102). Given its semantic limitation, a **[minimal]** answer is typically realised by a clause simplex, outclassifying any clausal expansion.

In contrast, the semantic option **[non-minimal]** indicates that the listener goes on to elaborate

the answer ‘by giving more information that is related to the matter in hand, but has not been specifically sought’ (Hasan, 2009[1990], p. 102). Semantically, the elaboration is neither an ‘extra verbiage’ nor ‘optional extra’; it is meaningful in the sense it reflects the respondent’s semantic estimation of the answer being sought. That is to say, it is exactly these pieces of information which, in the respondent’s view, are considered as significant and relevant to the on-going discourse. An answer selecting **[non-minimal]** is thus semantically-elaborated – it is supplemented by other messages, providing various elaborating relation like such condition, explanation, reservation, alternative etc (Hasan, 2009[1990], p. 103, see also Section 6.3.4.3)

6.3.5.1.2.3.3 Co-selection of semantic options from [adequate] vs. [inadequate] and [minimal] vs. [non-minimal]

The simultaneous intersection of *system f* and *system h* thus enables us to describe the semantics of an answer from the perspectives of both the enquirer and the compliant listeners.

The following extract provides a good illustration of the variability of answers.

Example 6.31 Ada - Doctor dyad

Turn S Msg ID Messages

8	D:	11	<i>==hai6</i> coverb	<i>bin1 go3</i> which Adjunct/ <i>vh</i>	<i>wai6 zi3</i> location	<i>hei2</i> occur Predicator	<i>aa3?</i> PRT Negotiator	
			‘Where does it hurt?’					
9	P:	12	<i>ni1 dou6</i> this	<i>seng4 go3</i> whole Subject	<i>==tou5</i> stomach	<i>dou1</i> all Adjunct	<i>hou2</i> very Adjunct	<i>tung3</i> hurt Predicator
			‘This whole==stomach hurts a lot’					
10	D:	13	<i>== ni1 go3</i> == this Adjunct	<i>wai6 zi3</i> area	<i>hei2</i> occur. Predicator			
			‘From this position’					
11	D:	14	<i>dong1 si4</i> that time Subject	<i>daai6 koi3</i> around Adjunct	<i>(hai5)</i> (is) (Predicator)	<i>gei2 dim2 zung1</i> what time when	<i>dou2</i> around Adjunct	<i>aa3?</i> PRT Negotiator
			‘When was that roughly?’					
12	P	15	<i>uk1 kei5</i> home Adjunct	<i>tung3</i> ache	<i>dou3</i> verbal suffix Predicator			
			‘When I was hurting at home,’					
		16	<i>dou1</i> all Adjunct	<i>jau5</i> have Predicator	<i>saam1 sei3</i> three, four	<i>go3</i> classifier Adjunct	<i>zung1</i> hours	<i>aa3</i> , PRT Negotiator
			‘it lasted for three or four hours already’					
		17	<i>tung3</i> ache	<i>dou3</i> verbal suffix Predicator	<i>aa1</i> PRT Negotiator			
			‘Ache like....’					

		18	<i>lam2</i> think	<i>zyu6</i> ASP Predictor	<i>fan3 gok3</i> sleep	<i>laa1</i> PRT Negotiator			
			‘I thought of going to bed’						
13	D:	19	<i>==hai6</i> right right ‘Right.’	<i>lo1</i> PRT Negotiator					
		20	<i>sik6</i> — eat	<i>[[go2 zan6 si2]]</i> that time Subject	<i>zau6 hai6</i> be Predicator	<i>[[sik6 zo2</i> eat Complement	<i>maan5</i> <i>faan6</i> dinner	<i>zi1</i> <i>hau6]]</i> after	<i>ge3</i> PRT Negotiator
			‘It that after dinner?’						
14	P:	21	<i>sik6</i> eat Predicator	<i>zo2</i> ASP	<i>laa3</i> PRT Negotiator				
			‘Yes, I ate.’						
		22	<i>cung1</i> show-	<i>zo2</i> ASP Predicator	<i>loeng4</i> -er	<i>laa3</i> PRT Negotiator			
			‘I showered as well’						

Example 6.31 is an extract of history-taking interaction of Ada-doctor dyad. This short extract entails three question-answer sequences, each of which provides various semantically-contrastive features in giving answers in the system of Cantonese.

Semantically, message 12 is a case of compliance – it provides a response which is cohesively related to the question enacted by the doctor, as in message 11. Here, Ada's response '*ni1 dou6 seng4 go3*' ('*the whole stomach*') serves to specify the location of her pain. In a message semantic sense, such a specification is sufficient to meet the enquirer's query point '*hai6 bin1 go3 wai6 zi3*' ('*in which area*') with no extra information added. In other words, the semantics of Ada's answer in message 12 is interpreted as [**adequate: specification: minimal**] – she has observed the query point of the question, thereby providing the barest amount of information

that, in her view, is sufficient to meet her panel doctor's specific need. Had her response been something like '*hai6...*' ('*in...*'), it would have been interpreted as **[inadequate: minimal]**, suggesting that while the response is cohesively related to, or more precisely, addressing the query point, it is, semantically, not adequate enough to serve as an answer since no specification is conducted.

Message 15 to 18, by contrast, presents another semantic phenomenon. In message 14, what the doctor is soliciting explicit is the time that pain occurred, which is realised lexicogrammatically by the preselection of a Wh-interrogative marker '*gei2 dim2 zung1*' ('what time'). As seen in messages 15 to 18, Ada's response is barely an answer in the sense her reply is barely related to the query point and it fails to provide a specification of the cognitive gap as set out in message 14. Interestingly, she provided an elaborated answer concerning the information that has not been explicitly sought, such as the duration and degree of her pain as well as the activity she was about to do at that time. Semantically, the answer that Ada has made is in some sense irrelevant⁹⁵: what she is doing here is that rather than addressing the enquirer's need, she emphasised the information which she deemed as the most relevant and important. In this sense, the semantics of Ada's answer (i.e. message 15 to 18) is analysed as **[inadequate: non-minimal]**.

Messages 21- 22 depict another semantic co-selection regarding the meaning option of giving answer. In message 20, the doctor enacted a **[non-assumptive: check]** question, verifying if Ada's abdominal pain occurred after her dinner. In replying this check question, Ada provided

⁹⁵ Viewed from the perspective of CONTINUATION, her reply is not totally irrelevant. It is still, **[topic-maintaining]**, concerning the pain that she suffered.

an

[adequate: affirmation: non-minimal] answer - it is adequate in the sense that the answer ‘sik6 zo2 laa3’ (‘Yes, I ate’) is sufficient to serve as a possible answer which addresses the directly the query point of the query point of the check question. This adequate answer is further elaborated by Ada, who further specified that she has, in essence, showered as in ‘cung1 zo2 loeng4 laa3’, a piece of information that the doctor has not explicitly sought.

6.3.5.1.2.4 A brief note on the semantic options [indirect] and its sub-options

Having discussed the semantics of answer (i.e. a **[direct]** reply), this section turns to the discussion of **[indirect]** reply. By **[indirect]**, I refer to all types of verbal replies which do not answer the questions directly. Important in it is its semantic fuzziness – the indirect replies exhibit no explicit cohesive relation with the question. As asserted by Hasan (2009[1990], p. 104), the success of soliciting information depends greatly on ‘what the addressee does in response to the question’. That is to say, while attempts have been made in cohesively linking with the question, if the responding statement is insufficient to fulfill the question’s query point, it, in a semantic sense, is merely *replying*, rather than *answering*. Viewed in this sense, **[indirect]** reply is NOT regarded as an act of answering in this study.

Despite the fact that **[indirect]** reply is not qualified as an answer, its semantics also deserve relevant to this current study. On the one hand, the option **[indirect]** is not a separated semantic attribute; it is, in essence, the systemic contrast of **[direct]** in *system e*, or more precisely, the ‘opposite’ meaning of **[direct]**. On the other hand, an **[indirect]** reply is also a meaningful act in the dialogical exchange, contributing to the development of the on-going

discourse. Semantically, an **[indirect]** reply is interpersonally-motivated, and is particularly relevant to the notion of POLITENESS, or more precisely, the notion of face and facework in interaction (cf. Brown and Levinson, 1978, 1987). In this sense, a brief discussion on the option **[indirect]** not only enables us to further our understanding of **[direct]**, but also allows us to appreciate the maintenance of interpersonal meaning throughout the discourse development.

As presented in Figure 6.8, the semantic option **[indirect]** is further sub-classified into two systemic contrasts, namely **[implied]** and **[evade]**, the latter being the point of entry of more delicate meaning options. It should be emphasised that the classification proposed here is far from exhaustive, and is only sufficient enough to capture the primary distinction of an indirect answer.

The semantic option **[implied]** captures what Grice (1975, p. 49) has suggested in his pragmatic study of conversation *viz.*, conversational implicature. An indirect reply selecting **[implied]** thus denotes one important semantic phenomenon – ‘by saying *p*, the listener is, in essence, has implicated *q*’. In a semantic sense, the **[implied]** reply entails no cohesive ties with the preceding question. The absence of cohesive ties does not indicate the reply is semantically irrelevant. It is still, in Hasan’s (2013, p. 283) words, a ‘contextually-relevant act’. More specifically, it is a conversational implicature - the enquirer has to make pragmatic inferences based on the contextual factors when processing the reply. Given that an implied reply is semantically implicit, it appears that the semantic option **[implied]** entails no specific lexicogrammatical realisation.

The semantic option **[evade]** denotes a rather distinctive semantic phenomenon. *Contra* **[implied]**, the semantic option **[evade]** indicates that the listener has no sincerity in meeting the conversational needs. In other words, the listener is evading the responsibility in giving a response regarding the question's query point – whether he or she is refusing to answer (i.e. **[refuse]**), disclaiming knowledge of fact and/or plead failure of memory (i.e. **[disclaim]**)⁹⁶ or counter-attacking the enquirer by evaluating the relevance of the question (i.e. **[attack]**) to name but a few (For a detailed discussion of evasive strategies, see Bull, 1994a, 1994b; Bull, 1998; Bull, 2008; Bull, 2009 and many others). In a semantic sense, the option **[evade]** is interpersonally-motivated, the analysis of the sub-meaning options thus contributes to our understanding of the interpersonal relations and interpersonal distance between the enquirer and the listener.

Lack of space precludes a detailed mapping of various evasive strategies and its lexicogrammatical realisations in the system of Cantonese, the above discussion is still sufficient to point out one fact – **[indirect]** reply share the same semantic significance of the **[direct]** one. An analysis of these two semantic system networks thus leads us to a better understanding of the interpersonal meanings at work.

Table 6.10 Tentative lexicogrammatical realisations of meaning options of ANSWER (Fragment F)

⁹⁶ While Hasan regards disclaiming knowledge of fact and/or plead failure of memory as the realisations of indirect response in mother-child talk, such a view appears problematic in doctor-patient communication. This is particularly true if the patient is an elderly suffering from aged-related memory loss. In this case, whether the patient is semantically evading the question remains questionable.

SEMANTIC OPTION		CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1	[responsive]	1) major: indicative: declarative 2) relate to the clause in the previous turn cohesively
a2	[non-responsive]	1) major: indicative: declarative 2) DO NOT relate to the clause in the previous turn cohesively
b1	[rejoin]	clause in the previous turn functions as speech function STATEMENT or COMMAND
b2	[reply]	clause in the previous turn functions as speech function QUESTION
d1	[verbal]	the mode of representation/channel of the clause preselects verbal
d2	[non-verbal]	the mode of representation/channel of the clause outclassifies verbal
e1	[direct]	the answer point of the declarative clause relates to the query point of the clause in the previous turn cohesively
e2	[indirect]	the answer point of the declarative clause DO NOT relate to the query point of the clause in the previous turn cohesively
f1	[adequate]	declarative clause relates to the query point of the clause in the previous turn both GRAMMATICALLY and LEXICALLY
f2	[inadequate]	declarative clause relates to the query point of the clause in the previous turn GRAMMATICALLY
g1	[affirmation]	the answer point of the declarative clause preselects positive polarity
g2	[negation]	the answer point of the declarative clause preselects negative polarity
g3	[specification]	the answer point of the declarative clause preselects wh-expressions
h1	[minimal]	declarative clause outclassifies clausal expansion
h2	[non-minimal]	declarative clause preselects clausal expansion
i1	[implied]	no specific realisation
i2	[evade]	polarity of the declarative clause preselects negative
j1	[refusal]	Process type of the declarative clause preselects verbal such as <i>wui4 daap3</i> (reply), <i>gong2</i> (say) etc.
j2	[disclaim]	Process type of the declarative clause preselects mental such as <i>zi1 dou6, sik1</i> (know) or <i>gei3 dak1</i> (remember) etc.
j3	[attack]	preselects modality/appraisal
k1	[immediate]	clause functioning as reply follows immediately the preceding QUESTION
k2	[delay]	clause functioning as reply DO NOT follow immediately the preceding QUESTION
l1	[interrupted]	1) clause functioning as reply follows the verbal interruption 2) QUESTION ^ interruption ^ ANSWER
l2	[occupied]	QUESTION ⁿ ^ ANSWER
l3	[incapable]	no specific realisation

6.3.5.1.3 Systems of COMMAND: a brief note

Before turning to ATTITUDINAL ASSESSMENT, let me offer a brief discussion on the systems of COMMAND. Hasan's semantic network of COMMAND was first published in early 1992, with twenty-five semantic options concerning the various aspects of commanding including orientation, attitude and mandatoriness etc. (Hasan, 2009 [1992], p. 283). Considering that the development of a Cantonese COMMAND network is a tremendous academic enterprise, it is, unfortunately, that a development of Cantonese COMMAND network will be beyond the scope of this present study.

6.3.5.2 A discussion of system of ATTITUDINAL ASSESSMENT

6.3.5.2.1 Why ATTITUDINAL ASSESSMENT ?

When developing and extending Hasan's message semantic networks, it appears that it is necessary to add a sub-system under RELATION ENACTMENT. Tentatively, I term this system as ATTITUDINAL ASSESSMENT. By 'attitudinal assessment', I mean a semantic system which particularly captures the attitudinal meanings loaded in each semantic act in the on-going discourse.

Important in this addition is that it pushes the descriptive delicacy of interpersonal semantics further, capturing the recent thought implied in Hasan's writings. As discussed in Section 8.3.5, RELATION ENACTMENT is a particular system dealing with interpersonal meanings in message semantics. Given the depth of interpersonal meanings in a language, it is reasonable to ask: *What types of interpersonal meaning should be focused in Hasan's interpersonal semantics?* In answering this question, it is perhaps fruitful if we turn to Hasan's careful writings. Indeed,

Hasan has always been cautious in providing terminologies or definitions in the message semantic descriptions. As Hasan (2013, p. 285, Footnote 9) writes

I have recently adopted '*relation enactment*' as the most inclusive term. This term replaces 'rhetorical stance', which had replaced 'role allocation' (emphasis mine).

Starting with ROLE ALLOCATION, and then RHETORICAL STANCE and subsequently RELATION ENACTMENT, Hasan has relabelled her terminology from time to time. Apparently, the three terms are neither synonyms nor terminological variants – they are, in essence, distinctive, reflecting her different conceptualisations of interpersonal semantics, or more precisely, the various semantic scopes that she was working on at that time. My own interpretation of '*relation enactment as the most inclusive term*' is that the interpersonal meanings to be focused here should NOT concentrate *exclusively* on the allocation of role in discourse in which she started with in the early 1980s, but includes other semantic dimensions.

One simple reason is that if emphasis is placed only on the role management, the description will just become another 'extended description' of Halliday's (1985) speech function network (cf. Eggins and Slade, 2004 for their extended description of speech function networks). Indeed, it should be emphasised that Hasan's message semantics is never an 'extended description' as one perceives; it is essentially a theorisation of semantic stratum. More specifically, the semantic descriptions entailed have been expanding, moving from a mere discussion on role management to rhetorical stance, which includes attitude, stance, evaluation or whatever terms you prefer. It is exactly this expansion which leads us to 'relation enactment'.

The inclusion of attitudinal assessment under *RELATION ENACTMENT* is also implicitly suggested in Hasan's writing. One piece of evidence is her recent view regarding the role of English intonation in message semantics. In the system of English, a great deal of interpersonal/attitudinal meanings are realised prosodically through intonation, which, in a SFL sense, is known as the *KEY* system (see Halliday, 1963; Halliday and Hasan, 1985; and Halliday and Greaves, 2008; and many others). For Halliday, intonation is one of the important aspects of English descriptions. Like other linguistic resources, intonation enjoys a full grammatical status – it is a 'grammatical system' in English and is capable in realising various meaningful contrasts within the four metafunctions in both semantic and lexicogrammatical strata (Halliday and Greaves, 2008, p. 51).

Among the four metafunctions, pattern of intonation are strongly associated with interpersonal meanings, conveying various attitudinal assessments towards the propositional content as well as towards the compliant listener. Take the primary tone of a declarative clause as an example. As shown in Figure 6.10, the *KEY* system of declarative entails five systemic options; each of which is realised by a distinctive tone. In the case of a declarative clause, these five tones are systemic and interpersonally-significant – each of them grammaticalises the speaker's attitudes in a declarative clause, or more specifically, 'the attitudes of the speakers towards the listener and towards the content of his or her own message' (Halliday and Greaves, 2008, p. 50). Important in this grammaticalisation is that it enables us to further recognise the subtle interpersonal differences in an English *STATEMENT*. Semantically, a statement realised by a declarative with tone 5 is not merely a declarative preselecting the mood structure '*Subject* ^

Finite ^ Predicator’; it is, in essence, attitudinal, expressing the speaker’s strong sense of assertion towards the listener as well as the content of the proposition. This contrasts with another statement which is realised by a declarative with tone 4 in the sense that it denotes a sense of reservation. In other words, every semantic act we enact in an interaction is attitudinal loaded. More precisely, it is exactly these attitudinal distinctions which enable us to further distinguish the differences of interpersonal meaning of the speech function STATEMENT.

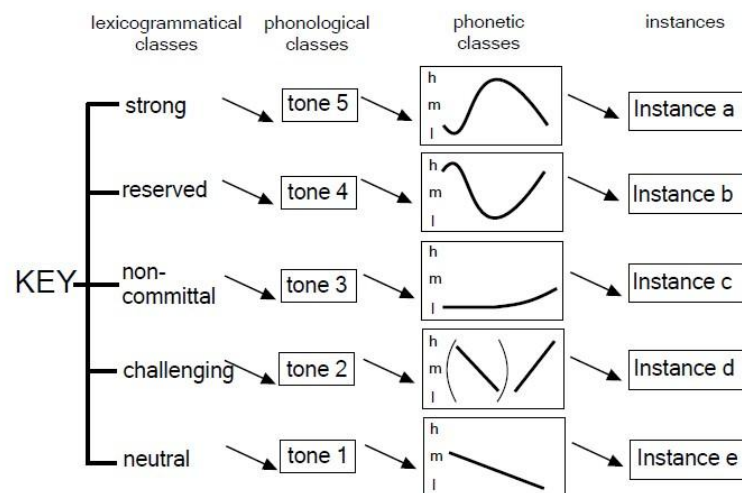


Figure 6.10 The KEY system of primary tone of declarative in English (Halliday and Greaves, 2008 p. 50)

Theoretically, Halliday’s functional description of the system of intonation makes a great contribution to not only grammar, but also semantics, if not discourse. Given the semantic significance of the KEY system in RELATION ENACTMENT, it, unfortunately, has not been brought to Hasan’s attention in early 1980s. Hasan (2013, p. 292, Footnote 14) writes:

When these semantic networks were first designed (Hasan, 1983) the relevance of the KEY system (Halliday & Greaves, 2008) to the interpersonal meaning of clauses was not as obvious to me. Today, *by bringing in this information, the meanings of the choices would certainly be increased a good deal* (emphasis mine).

As seen in the above quote, a lack of consideration of attitudes in Hasan's existing semantic networks should not been interpreted as 'semantically-irrelevant'. Rather, it is of utmost importance as it helps push the descriptive delicacy of each semantic act further, thereby enabling us to truly appreciate the enactment of relations in a dialogic exchange. In other words, it is exactly the combination of both SPEECH FUNCTION and ATTITUDINAL ASSESSEMENT which is sufficient to meet Hasan's underlying conceptualisation of RELATION ENACTMENT.

6.3.5.2.2 An informal view of semantic options pertaining to ATTITUDINAL ASSESSEMENT

Having acknowledged the descriptive inadequacy in Hasan's existing English RELATION ENACTMENT, it appears that in developing the Cantonese semantic networks, the semantic description proposed should be capable in capturing the interpersonal feature of attitudes in the semantic stratum. In so doing, a tentative system network ATTITUDINAL ASSESSEMENT is proposed under RELATION ENACTMENT in Cantonese message semantics, drawing on Wong's (2009) insights on her work on punctuative messages. Figure 6.11 presents a tentative Cantonese system of ATTITUDINAL ASSESSEMENT.

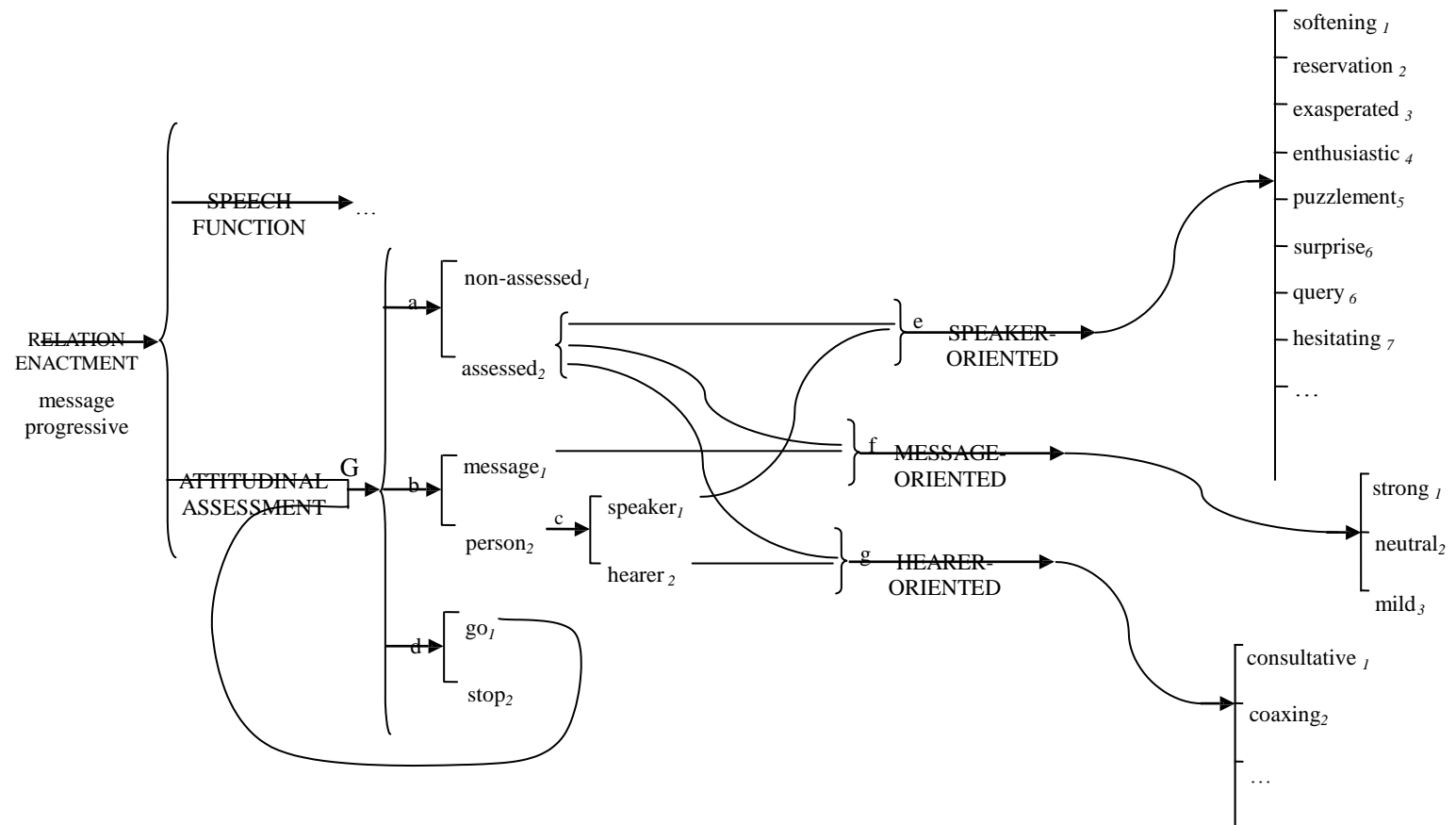


Figure 6.11 A tentative semantic network of ATTITUDINAL ASSESSMENT in Cantonese (Fragment G)

As illustrated in Figure 6.11, the system of ATTITUDINAL ASSESSMENT and SPEECH FUNCTION are conceptualised as a pair of simultaneous systems. Semantically, these two systems are inter-related, each of which depicts the different semantic vectors in enacting interpersonal relations. Whereas the system of SPEECH FUNCTION is concerned with the delicate meaning options entailed in each speech function, or more precisely, each contextually-relevant semantic act in discourse; the system of ATTITUDINAL ASSESSMENT is connected with whether or not the semantic act in discourse is attitudinal, and if it so, what kinds of attitudes are enacted. Given this orientation, the system of ATTITUDINAL ASSESSMENT is thus conceptualised as three simultaneously dependent systems, *viz.*, ASSESSMENT (i.e. *system a*), TARGET (i.e. *system b*) and RECURSION (i.e. *system b*).

The system of ASSESSMENT (i.e. *system a*) concerns whether the semantic act under focused is attitudinally-assessed. In a SFL sense, ‘attitudes’ has received various linguistic interpretations. In English, attitudes conveyed through intonations, in Halliday and Greaves’ (2008) view, are inherently, grammatical (For their rationale, see Chapter 3, p. 51). The systemic contrasts of attitudinal meanings thus exhibits close association with mood, serving as the ‘delicate distinction’ of mood. In Martin and White’s (2005) appraisal analysis⁹⁷, attitudinal meanings are conceptualised semantically – it is one of the major analytical frameworks in their interpersonal discourse semantics so that attitudinal meanings are realised lexically in lexicogrammar. In this study, I conceptualise attitude in a semantic sense, regarding

⁹⁷ The conceptualization of ATTITUDINAL ASSESSMENT proposed here is different from those by Martin and White. Whereas APPRAISAL is developed through monologic text from academic discourse, the assessment of attitude here is, in essence, dialogic.

it as a semantic attribute which adds ‘extra’ meanings to the messages under focused⁹⁸. Drawing on Wong’s (2009) conception of punctuative message, a message can thus be classified as either **[non-assessed]** and **[assessed]**. A semantic act in a dialogic exchange selecting **[non-assessed]** suggests that it is attitudinally-unmarked, whereas **[assessed]** denotes that the realising message is attitudinally-loaded. The system of TARGET (i.e. *system b*), by contrast, concentrates on the targeted audience being appraised in an exchange. In a dialogic interaction, there are two loci which deserve to be noted, namely **[message]** and **[person]**. Semantically, the option **[message]** denotes that it is the content of the message which is being evaluated in the course of negotiation. On the contrary, the meaning option **[person]** indicates that it is the interlocutors involved in the exchange which is under evaluation. The option **[person]** is subsequently distinguished based on their speech role in the interaction, yielding two sub-options **[speaker]** and **[hearer]**. The final system, system of RECURSION, captures the iteration of attitudinal meaning in discourse.

As an initial mapping, the primary focus of ATTITUDINAL ASSESSMENT discussed here lies in whether or not the messages functioning as a semantic act in a dialogical negotiation entail an enactment of attitudes from the speaker’s perspective. Such attitudinal assessments can be organised in three semantic regions:

- 1) SPEAKER-ORIENTATION: whether the speaker enacts attitudes towards

⁹⁸ As Hasan *et al.* (2007: 698 - 699) have asserted, ‘meaning and wording are the two sides of the same icon’. In this sense, whether attitude is interpreted as a grammatical system or a semantic one is, in my view, both applicable. Perhaps, the most relevant issue is in what way we engage with SFL. Halliday is typically a grammarian who, unsurprisingly, sees lexicogrammar as ‘the powerhouse of a language’ (Halliday, 1998), whereas Martin identifies himself as a discourse analyst, viewing discoursal meaning as his primary research agenda (Martin, 2014).

himself/herself, if yes, what attitudes are exhibited;

- 2) MESSAGE-ORIENTATION: whether the speaker is committed towards the content of the semantic act, if yes, in what degree he is committed; and
- 3) HEARER-ORIENTATION: whether the speaker enacts attitudes towards the compliant listener, if yes, what attitudes are exhibited.

Each semantic region, of course, permits further classification, yielding more delicate attitudinal meaning. In this study, the further meaning options proposed in Figure 6.11 are some common ‘descriptive labels’ of attitudes adopted from Cantonese linguistic literature (e.g. Luke, 1990; Leung, 2005, Cheung, 2007, Matthews and Yip, 2011; Yap and Chor, 2014, and Tang, 2015, and many others). For the sake of illustration, the meaning options are presented as a long ‘list’ of possible attitudinal meanings available in the Cantonese and receive no further systematic account.⁹⁹ Despite the unsystematicity, such meaning options/descriptive labels, in my view, are sufficient to illustrate the how delicate meanings of attitude are metaredundantly realised by lexicogrammatical and phonological strata.

6.3.6 Systems of CLASSIFICATION: a brief note

The final metafunctionally regulated system is CLASSIFICATION, concerning the experiential meanings in relation to *processes* and *entities*. Scope of this project prevents a full account of this system. Yet, my personal view is that the Cantonese CLASSIFICATION system, at the least delicacy, bears strong resemblance to experiential grammar. In SFL, experiential meanings have been well-rehearsed in lexicogrammar since 1980s, in terms of functional labels such as

⁹⁹ See Chapter 9 for a discussion of research limitation.

Actor, Goal, Behavior etc (Halliday and Matthiessen, 2014). This delicate discussion, as Halliday and Williams note, is in itself an elaborated account drawing on the insights from semantics (see Halliday and Matthiessen, 2006 for their discussion on ideational semantics).

6.4 Cantonese and English semantic descriptions: one network or two?

As the above Section 6.3 illustrates, the initial mapping of Cantonese messages semantic networks, to a certain extent, bears a strong resemblance to those Hasan's English networks. This is, perhaps, not surprising in a sense that both Hasan's English message semantic network and the Cantonese one operate within the 'multidimensional semiotic space of language in context' (Caffarel *et al.*, 2004, p. 18), featuring the same systemic notions as in (1) open context, (2) unit of analysis, (3) trinocularly and (4) metafunctional regulation (see Chapter 4 Section 4.3). It comes natural that both of them enjoy a similar overall systemic organisation, or more precisely, a simultaneous system embracing RELATION ENACTMENT, CONTINUATION, AMPLIFICATION and CLASSIFICATION as member systems.

However, it should be emphasised that while both Cantonese and English networks resemble each other, the proposed Cantonese one should neither be deemed as a mere direct transfer nor a modified one from English to Cantonese. Simply, there are two inherited reasons.

(i) Subtle distinction among meaning options and systemic relations

As discussed, the development of semantic networks follows Hasan's notion of message semantics, aiming at producing an account of language exhaustive meanings of any given language. Despite the fact that English and Cantonese might

share the same act of meaning (i.e. *meaning-as-process*), it is possible that these universal meanings across languages do not share the same systemic relation, that is, the meaning option might not systemically organised as the same pair of systemic contrast (i.e. *meaning-as-product*). One example of such is the semantic option **[verify]** in RELATION ENACTMENT. At the least descriptive delicacy, whereas the English **[verify]** permit a sub-classification of two mutually exclusive option between **[probe]** and **[reassure]** – the former denotes an assertive stance in probing speaker’s belief in the proposition whereas the latter suggests a neutral or mild stance in the course of soliciting hearer’s agreement (McGregor, 1995, p. 98), the Cantonese **[verify]** does not readily entail a sharp distinction regarding the speaker-oriented stance towards the propositional content. The semantic disparity of **[verify]** between English and Cantonese, together with their inherited difference of systemic relations among meaning options, constitutes two distinctive meaning potentials, and thus two message semantic networks.

(ii) Different lexicogrammatical realisation in two language systems

Semantic network in SFL is not a mere taxonomy of meanings of any given language; it is a systemic mapping of meaning potential emphasising both *meaning-as-function* and *meaning-as-form*. In spite of the fact that while both English and Cantonese enjoy a similar meaning potential, serving nearly the same semantic/communicative functions in context (i.e. *meaning-as-function*), the activated selections of linguistic resources (i.e. *meaning-as-form*) might not be homogenous. From a language typological/ multilingual sense, lexicogrammatical

realisations are always language-specific, reflecting not only the subtle disparities of their ‘powerhouses of language’, but also the social and contextual ideologies within the language communities. A typical example of such is the semantic option **[ask]** in RELATION ENACTMENT. Although both English and Cantonese **[ask]** refer to most neutral, or the ‘unmarked’ way in soliciting a yes-no response, they are indeed realised differently in lexicogrammar preselecting different ‘mode of expression’ (Cafferal *et al.*, 2004). Whereas the former is realised *structurally* by Finite + Subject in MOOD and *intonationally* by TONE 2, the latter is realised *segmentally* by either A-not-A marker or mood particle at the clause final juncture. The Cantonese lexicogrammatical realisation, *contra* English, is always semantically unbiased, which, in a message semantic sense, outclassifies the entry to ASSUMPTIVENESS (cf. **[assumptive; ask]** and **[non-assumptive; ask]** in Hasan 1983). In other word, it is these very distinctions which construe the different conceptions of ASSUMPTIVENESS in Cantonese and English, thus yielding two distinctive message semantic networks.

6.5 Chapter Summary

This chapter has offered an initial mapping of Cantonese semantic networks as well as semantic options with respect to the systems of PROGRESSIVENESS, AMPLIFICATION, CONTINUATION and RELATION ENACTMENT. Brief as it is, the descriptions proposed here are suffice to illustrate the semantics of Cantonese, which serve as the analytical framework in analysing doctor–patient communication in the subsequent chapters.

Chapter 7

REGISTERIAL ANALYSIS OF DOCTOR – PATIENT INTERACTION: A GSP ANALYSIS

7.1 Introduction

Chapter 7 intends to operationalise the Cantonese message semantic networks through Hasan's GSP analysis. Section 7.2 first offers a brief review regarding the structural organisation of doctor-patient communication within four traditions, *viz.*, ethnomethodology, Systemic Functional Linguistics (SFL), English for Medical Purposes (EMP) and Academic Medicine (AM). Section 7.3 then turns to a discussion on Hasan's notion of text and registerial identity. Having discussed her descriptive foundation, Section 7.4 characterises the registerial meanings in terms of *system* (i.e. Generic Structure Potential (GSP)); *instance* (i.e. Actualised Global Structure (AGS)); *process* (i.e. cross-stratal calibration) and *product* (i.e. generic elements). By linking the network descriptions towards register, the qualitative account thus illustrates how generic elements in ED patient journey are semantically manifested through exchange structures and subsequently through the activated semantic options in each 'act of meaning'.

7.2 A brief review on the organisation of doctor-patient communication

The study of the structural organisation of medical consultations is, of course, not a novelty; it has a long tradition in a number of disciplines since 1970s, with various established models proposed the literature on medical encounters. Briefly, there are four traditions in approaching the organisation of doctor-patient communication:

1. **Ethnomethodology:** it models the medical interview in terms of 'macro-

organisation’ and ‘micro organisation’. With regard to the former, it characterises the discourse as a number of structured and predictable ‘*phases*’; each of which is organised around topics (Byrne & Long, 1976; Heath, 1986; ten Have, 1989). With regard to the latter, it examines the organisation of sequence and turn-taking between doctors and patients in medical interview, drawing on the techniques of Conversation Analysis (CA) (Heritage, 2005; Heritage and Maynard, 2006; Robinson, 2006).

2. **Systemic Functional Linguistics (SFL)**: it models medical encounters as *register/genre*. Within this approach, textual structure is comprised of a series of generic elements/stages; each of which denotes major shifts at the level of context (Halliday and Hasan, 1985; Martin, 1992; Ventola, 1987). Such contextual shifts are subsequently realised in terms of its clustering of semantic and lexicogrammatical properties (Tebble, 1999; Moore, 2004; Slade *et al.*, 2008).
3. **English for Medical Purposes (EMP)**: building on the genre model developed in English for Specific Purposes (ESP) research (Bhatia, 1993, 2004, 2008; Swales, 1990), it conceptualises the global structural organisation of doctor-patient communication as ‘move structure’ based on the repeated instances of interaction. Important in these moves is that they serve to realise the communicative purposes of the genre (Černý, 2007; Holst, 2010)
4. **Academic Medicine**: drawing on the expertise of medical practitioners and educators, it models medical interviews as a ‘practical teaching tool’ in the curriculum of medical communication skills. Important in this approach is that

medical interview organised as a generic checklist for teaching and assessing the communicative competence of medical students. Typical examples include Makoul's (2001a) *SEGUE Framework for teaching and assessing communication skills*; Makoul's (2001b) *Kalamazoo Essential Elements: The Communication Checklist* and Kurtz *et al.*'s (2003) *The Enhanced Calgary – Cambridge Guides*.

Space prevents a full report on these prominent models (see Brown *et al.*, 2016) . Table 7.1 tabulates the comparison of the overall structural organisation of medical consultation.

Table 7.1 A comparison of the overall structural organisation of medical consultation

Traditions	Ethnomethodology		EMP		Academic Medicine		SFL	
Medical site	General Practitioner		Corpus data ¹⁰⁰	Outpatient department	Generic medical interview		Division of Nephrology	Emergency department
Phase/stage/	Byrne and Long (1976)	ten Have (1989)	Černý (2007)	Holst (2010)	Makoul (2001)	Kurtz <i>et al.</i> (2003)	Tebble (1999)	Slade <i>et al.</i> , (2008)
Greetings and opening	Establishing a relationship	Opening		Greetings and relating to the patient	Build the doctor-patient relationship	Initiating the interview	Greetings	Greeting
					Open the discussion		Introduction	Initial contact
Presentation of complaint	Discovering the reason for a patient's attendance	Complaint	History taking	Reason for attendance	Gather information	Gathering information	Stating/ Eliciting Problem	Exploration of condition
				History of presenting illness -----Previous medical history				History taking
Examination	Conducting a verbal and/or physical examination	Examination or test	Examination	Physical examination		Performing the physical examination		Physical examination
								Diagnosis tests/ Procedures
Diagnosis	Evaluating the patient's condition	Diagnosis		Diagnosis	Share information		Ascertaining Facts	Consultation with other doctors
							Diagnosing Facts	Diagnosis
Establishment of a therapeutic plan	Detailing treatment or further investigation	Treatment or advice	Treatment	Detailed treatment and further investigation	Reach agreement on problems and plans	Explaining and planning with the patient	Stating Resolution/ Exposition	Treatment
							Decision by Clients	
							Clarifying any Residue Matter	Disposition
Closing of the talk	Closing	Closing		Closing the consultation	Provide closure	Closing the session	Conclusion	Goodbyes
							Farewell	

¹⁰⁰ As remarked by Černý (2007), the corpus data includes the authentic face-to-face medical conversation of Internal Medicine, Obstetrics and Gynaecology, Paediatrics, Otorhinolaryngology, and Orthopaedics.

Though the comparison of structural constituents across disciplines appears brief and sketchy, it is sufficient to recognise three observable phenomena:

Viewed *horizontally*, the study of the structural organisation of medical interviews has increasingly gained momentum since the 1970s, with an expansion in terms of (i) the diversity of medical site, (ii) its communicative dynamisms and (iii) its structural complexity (iii). More specifically, it is not until late 2000s that the ED consultation – the central object of enquiry of this study – was examined linguistically.

Viewed *vertically*, medical consultation, in the most general sense, exhibits a six-phase structure sequentially ordered as *greetings and opening* ^ *presentation of complaint* ^ *examination* ^ *diagnosis* ^ *establishment of a therapeutic plan* ^ *closing of the talk*. Each of these stages can be sub-categorised into a number of sub-stages.

Despite a fairly ‘fossilised’ structural organisation, it should be emphasised that the identification of structural constituents – linguistically known as *stages* or *phases* – are typically atheoretical¹⁰¹, with a mere focus on the goals associated with the communicative events (see Slade *et al.*, 2008 for an exception). It, therefore, remains illusive and elusive whether these structural elements unfolding longitudinally in context could contribute to an understanding of the complex process of medical consultation.

¹⁰¹ It should be emphasised that whether CA is theoretical framework remains debatable in the literature. My personal view is that a CA approach to discourse analysis is atheoretical – the analysis is a mere systematic descriptions of interactional phenomena based on the heavily annotated transcripts of spoken discourse.

In responding to these observations, the current chapter takes ED medical consultation as the central object of enquiry. More specifically, I will situate myself within the SFL approach by taking the situational context as the nub of investigation, though references will be made to CA approach when necessary. One key benefit is that it enables us to better our understanding on how the contextual configuration activates the structural organisation of doctor-patient communication in emergency department, and more precisely, how it is modelled as both potential and actualised instances.

7.3 A systemic modelling of structure: Hasan's notion of *text*, *register* and *structure*

Among the various systemic functional approaches, I particularly draw on Hasan's notion of *text structure* as my analytical foundation. What is unique in Hasan's approach is that it is motivated by a model of language (Hasan, 1978, 1979), emphasising the close relations between *structure*, *register* and *contextual configuration*. Structure, in her views, is both a potential and actualised instance, which is known as REGISTERIAL/GENERIC STRUCTURAL POTENTIAL (GSP) and ACTUALISED GLOBAL STRUCTURE (AGS) respectively. To illustrate, let me first start with a brief discussion of the conceptualisation of *text*. In SFL, text is always a crucial linguistic entity because it is the point of departure to system beings, and its conception is crucial to the validation of the categories of register (Hasan, 2014b, p. 4).

In Chapter 3 Section 3.4.3, *text* is regarded as an instantiation of the language system, situated at the instance pole of the cline of instantiation. However, such a definition is far from comprehensive as it only illustrates one dimension *viz.*, *instantiation*. To illustrate the complexity of *text*, let me turn to Hasan's recent work, which offers a holistic and comprehensive definition

of text. As Hasan (2014b, p.4) writes:

In the early 1960s, the term ‘text’ had been much the same in Halliday’s writing as in the other models of general linguistics. To quote, ‘The data to be accounted for are observed language events, observed as spoken or as codified in writing, any corpus of which, when used as material for linguistic description, is a “text”’ (Halliday 1961, p. 243). ‘Text’ now represents a qualitatively different, more mature, concept though retaining the same name: today in SFL, we see ‘text’ as *naturally occurring language use*, therefore having a *social function*, and possessing the attributes of *texture* and *structure* (Halliday and Hasan, 1976; 1985; Hasan, 1978); as an *instance of register*, *the text may be simple or complex* (Hasan, 1999); and, most importantly, *in instantiating the linguistic system*, this is where every form of linguistic regularity as also every move in innovation will manifest itself (Halliday, 1991/2007b). The text, thus, represents a measure of what language is able to do: it is a reliable source of insight into the power of the language system (Matthiessen, 2009) (emphasis mine).

As seen from the above quote, the conception of *text* in the systemic functional model has been greatly elaborated during the past decades, evolving from a simple conception that ‘language is doing some job in some context’ (Halliday and Hasan, 1985, p. 52) to a complex linguistic entity. That is to say, the identity of a text lies neither in the language events nor the recognition of grammatical units and lexicon in a language, but essentially its authenticity, its unity, its relations with social context and with linguistic system. Among these attributes, unity is a crucial criterion enabling us to distinguish between (1) a text and a non-text, (2) a complete text and an incomplete one and (3) a simple text and a complex text¹⁰² (Halliday and Hasan, 1985, Hasan,

¹⁰² By ‘simple text’, I follow Hasan’s (1999, p. 272) conceptualisation, referring to texts displaying the principle of contextual/registerial consistency. In other words, simple text is the text which enjoys one relevant context, and the contextual configuration remains consistent throughout the entire text. Complex text, by contrast, refers to texts displaying the principle of contextual/registerial shift. That is to say, in addition to the main text, or more specifically, the primary text that the social event is unfolding, there are functionally related sub-texts which run in parallel or integrate into the main text either experientially or interpersonally. See Hasan (1999, 2011) for details.

1978, 1979, 1984, 1994, 1999, 2009, 2011, 2014 etc.). As pointed out by Hasan, only simple text ‘manifests one permissible pattern of textual structure’ (Hasan, 2011, p. xxix).

While every simple text displays a structural make-up, or more technically an ACTUAL GLOBAL STRUCUTRE (AGS) (Hasan, 2009, p. 186), it should be emphasised that the notion of textual structure, in Hasan’s view, is always oriented towards register but not the instancial text itself. For Hasan, textual structure is a concept analogous to a system, which should ‘rise above the instance’ (Hasan, 2011, p. xxix) so as to accommodate both the variant and invariant properties of textual structure in the register (Hasan, 2011 [1984], p. 293). In this sense, by saying ‘texts have structure’ is to suggest that there is a ‘recognisable overall shapes for texts’ in a particular register, and each individual text structure is regarded as one instantiations of the overall structure of the register.

Given that each text structure is unique in its own right, it is also noteworthy that these individual text structure are not ‘separate entity’ (Halliday and Hasan, 1985, p. 68) in the sense that they share the same contextual configuration, thus exhibiting some structural regularities. In other words, Hasan’s notion of textual structure is neither an examination of the individual text structure nor a mere summary/generalisation of the structures identified in the analysed texts, but essentially an exploration of the ‘systemic variation in text structure in correlation with variation in contextual configuration’ (Hasan, 2011, p. xxix). As a result, rather than describing the textual structure as a fixed, rigid schematic construct, the description is represented as a potential (i.e. meaning-as-system), or more specifically, an abstract descriptive category which is capable of realising a finite number of AGS (i.e. meaning-as-instance). Such a generalised description about

the structural resources available within a given register is technically known as REGISTERIAL/GENERALISED STRUCTURE POTENTIAL (GSP) (Hasan, 1978, 1984, 1985, 2009, 2014 and many other publications, cf. contextual structure in Matthiessen and Slade, 2010¹⁰³).

As one can recognise, Hasan's works are always rooted in the Hallidayan tradition. It is thus a natural development that GSP is conceptualised from a trinocular perspective. In other words, in addition to viewing it 'from above', Hasan argues that it is of equal importance to consider GSP 'from roundabout' and 'from below' so that the discussion of the realisation of textual structure will involve three types of abstraction, namely (i) the name of the element, (ii) its crucial semantic attribute(s) and (iii) the lexicogrammatical pattern – the latter two, in today's terms, are known as realisation statements. For Hasan, the realisation statements are important because only through such a detailed description in both semantics and lexicogrammar could one identify and state the elements in a 'systematic, non ad hoc manner' (Hasan, 2011 [1984], p. 315).

7.4 Characterising the structure of patient journey – a view of GSP

In Hasan's GSP analysis, the social activity of a register is comprised of a number of *stages*. While some of them are directly realised in language (i.e. verbal actions) and some are only inferred (i.e. non-verbal actions) (Hasan, 1994, p. 142), they are 'communicatively important' (Hasan, 1994, p. 150) in a sense that they all contribute to the completion of the social activity. In

¹⁰³ It should be noted while Hasan and Matthiessen have discussed the notion of structure; the conceptions are slightly different from one another. Hasan interprets the overall-all structural shape of a text as the instantiation of some register type. In other words, the conceptualisation of *GSP*, in her view, lies in the registerial level – it is the potential of text structure of a given register. *Contra* Hasan, Matthiessen considers the structural potential in the level of context. For Matthiessen, contextual analysis of a situation type where the register is associated with not only involves the characterisation of field, tenor and mode, but also in terms of the *structure* of the context. In other words, Matthiessen's 'structural potential' is essentially a contextual construct, realised by various 'text structure' (Matthiessen in Anderson *et al.*, 2015, p. 31 – 32, see also Matthiessen, 2014, Matthiessen and Slade, 2010 Matthiessen, *et al.*, 2010). Following Hasan, this study regards *structure* potential registerially, but not contextually.

view of this, each stage of the social activity serves as the constituents of the over-all structural shape of a register – they are essentially the *elements* that exist in every text structure. Each element, as remarked by Hasan (2011 [1984], p. 304) are realised by its relevant semantic properties exhibited in the level of messages, which is subsequently realised in the realising clauses. Following Hasan, generic element is defined as the central unit of analysis in characterising the structural organisation of ED patient journey. More specifically, it is a stretch of text which exhibits ‘registerial consistency’ (Hasan, 1999) or more specifically, continuity across contextual configuration as well as the three metafunctions. A shift in generic elements thus denotes a significant reclassification of *field*, *tenor* and *mode*, and therefore the respective meanings.

7.4.1 Generic structure and generic elements

Based on the analysis, eighteen generic elements are identified across the data. For the clarity of presentation, I organise these generic elements under ‘activity stage’ and ‘phase’¹⁰⁴ (see Table 7.2). Viewed in a sequential sense, a patient journey can be divided into two activity stages *viz.*, ‘initial medical consultation’ and ‘final medical consultation’ – the former refers to the stretch of text occurred before diagnosis whereas the latter after it (Slade *et al.*, 2015, p. 69 – 73). As Slade and her colleagues note, the separation of medical consultation into two main stages is one of the remarkable features of emergency communication (Slade *et al.*, 2015, p. 65). In some occasions, there is one more activity stage which I term as ‘follow-up consultation’; it is a post-medical activity after final medical consultation (see Crystal’s medical encounter).

¹⁰⁴ It should be emphasised that the inclusion of *activity stage* and *phase* here by no means suggest that patient journey, *activity stage*, *phase* and *generic elements* stand in a relation of consistency. One major reason is that the conceptions of ‘activity stage’ and ‘phase’ are not motivated by semantics and lexicogrammar.

Each activity stage, in turn, consists of one or more phases, which group(s) the typically co-occurring generic elements together. Typically, the ED communication consists of eight basic phases based on the communicative goals: (i) opening, (ii) uncovering patient conditions, (iii) initial management, (iv) signposting diagnostic tests and procedures, (v) delivering clinical judgment, (vi) delivering medical care, (vii) disposition, and (v) closure. The idea of ‘phase’ here thus shades into what Byrne and Long (1976) and ten Have (1989) have termed as ‘sequence’ in their earlier medical encounter research. A move from Phase 1 to Phase 8 thus represents the ‘ideal sequence’ of ED patient journey (e.g. Byrne and Long, 1976, and ten Have, 1989).

Table 7.2 The generic elements of ED patient journey of Category III patients

Activity stage	Initial medical consultation (IMC)				Final medical consultation (FMC)			
Phase	1	2	3	4	5	6	7	8
	Opening	Uncovering patient conditions	Initial management	Signposting diagnostic tests and procedures	Delivering clinical judgment	Delivering medical care	Disposition	Closure
Generic element	Identification (I)	Problem Presentation (PP)	Initial Diagnosis (ID)	Diagnostic Plan (DP)	Final Diagnosis (FD)	Treatment Negotiation (TN)	Discharge (DC)	Dismissal (DM)
	Greeting (G)	History Taking (HT)	Immediate Treatment (IT)	Clinical Test (CT)		Prospective Treatment (PT)	Admission Negotiation (AN)	Finale (F)
	Allergy Check (AC)	Physical Examination (PE)					Admission (A)	

Space prevents a full explication of each generic element. For clarity, functional descriptions of each stage in ED patient journey are tabulated in Table 7.3, with particular emphasis on its contextual orientation (i.e. whether the generic element is oriented to FIELD OF DISCOURSE, *or* TENOR OF DISCOURSE *or* both).

Table 7.3 A contextual description of generic elements in Category III ED patient journey in Hong Kong context

Phase	Generic element	Orientation		Optionality
		Field	Tenor	
<i>Phase 1 Opening</i>	Identification (I)	verifying interactants' identity so that both doctors and patients know whom they are talking to	defining role allocation between interactants: doctor – patient dyad	obligatory
	Greeting (G)	nil	conveying a sign of welcome, and minimise the social distance between doctors and patients	optional
	Allergy checking (AC)	reviewing patient's drug profile so as to prevent 'Known Drug Allergy (KDA)'	nil	obligatory
<i>Phase 2 Uncovering patient conditions</i>	Problem Presentation (PP)	offering patients 'interactional space' to present their 'health-related' story	nil	optional
	History Taking (HT)	detailing the medical symptoms and illness by probing into the 'story' in PP, including <i>when</i> , <i>where</i> , <i>how</i> etc.	nil	obligatory
	Physical Examination (PE)	examining patient's physical ability (i.e. the ability to perform some physical acts such as bending,	nil	obligatory

		twisting, stretching etc).		
Phase 3 <i>Initial management</i>	Initial Diagnosis (ID)	providing an <i>preliminary</i> diagnosis	rapport building i.e. to reassure and clam patients	optional
	Immediate Treatment (IT)	doctor evaluating the feelings, reactions and judgements of medical symptoms from the point of view of patients after immediate therapeutic care	nil	optional
Phase 4 <i>Signposting diagnostic tests and procedures</i>	Diagnostic Plan (DP)	surveying diagnostic procedures that patients have to undertake throughout the subsequent patient journey	nil	optional
	Clinical Test (CT)*	performing diagnostic tests established in DP	nil	optional
Phase 5 <i>Delivering clinical judgment</i>	Final Diagnosis (FD)	(i) delivering <i>decisive</i> clinical judgement (ii) providing medical interpretations i.e. explanations of what the diagnostic results mean to patients	showing clinical empathy to patients, especially when delivering ‘bad news’	obligatory
Phase 6 <i>Delivering medical care</i>	Treatment Negotiation (TN)	offering doctors and patients space to negotiate for a preferred medical	nil	optional

		option so that the treatment option is a mutually agreed decision		
	Prospective Treatment (PT)	<p>(i) finalising of result of treatment negotiation</p> <p>(ii) spelling out the details of medication (e.g. the type of medicine being prescribed, its functions, instructions and potential side-effects),</p> <p>(iii) checking patients' understanding of key information etc.</p>	nil	obligatory
<i>Phase 7 Disposition</i>	Discharge (DC)	<p>providing further medical support to patients :</p> <p>(i) answering patient's follow-up questions,</p> <p>(ii) educating patients on diagnosis, treatment plan, and the signs and symptoms to watch for,</p> <p>(iii) giving medical advice to patients</p>		obligatory
	Admission Negotiation (AN)	offering doctors and patients space to negotiate the necessity of hospitalisation		optional

	Admission* (A)	performing the admission procedures		obligatory
Phase 8 Closure	Dismissal (DM)	functioning as an <i>experiential</i> closure (i) issuing referral letters; (ii) inviting patients to leave the cubical, (iii) instructing patients to go to the pharmacy to collect medicine etc		obligatory
	Finale (F)		functioning as an <i>interpersonal</i> closure by terminating the doctor-patient communication	optional

Note: Clinical Test (CT) and Admission (A) are *typically* performed by healthcare staff other than doctors.

In a *typical-ideal* sense, these generic elements progress in a ‘linear, step-by-step’ fashion (Xu *et al.*, 2010, p. 453), though a number of structural variations and alternative patterns are observed due to its interactive nature. The linear progression of elements thus constitutes the structural potential of ED patient journey in Hong Kong context (see Figure 7.1).

GSP of IMC:	$[(\langle G \rangle) \bullet PI] \wedge AC \quad [^{\wedge} (PP) \wedge \langle HT^n \rangle \wedge \langle PE^n \rangle] \wedge [(ID) \wedge (IT)] \wedge [DP \wedge CT]$
GSP of FMC:	$[(\langle G \rangle) \bullet PI] \wedge D_{\#} \wedge \#1 AN^{* \rightarrow} \wedge [^*1 A] / [[\begin{smallmatrix} \rightarrow *2 \\ \rightarrow \#2 \end{smallmatrix} \langle PT \rangle \wedge \langle TN^n \rangle \wedge \langle DC^n \rangle] \wedge [DM \wedge (F)]]$

Figure 7.1 The GSP of the ED patient journey of Category III patients

Prior to moving on to the details of generic elements, let me briefly spell out the representation of GSP in Hasan's convention (Halliday and Hasan, 1985; Hasan, 1979, Hasan, 1994 and many others). For Hasan, her conventions deal with four aspects: (i) optionality, (ii) ordering, (iii) interspersions/inclusion, and (iv) recursion/iteration.

In Hasan's GSP model, an obligatory element is 'an expression of the identity a type of social process' so that any non-occurrences will be regarded as 'a marked affair' whereas the optional one does not (e.g. Hasan, 1979, p. 384; see also Halliday and Hasan, 1985, p. 62). To represent the obligatoriness, a round bracket '()' is employed. In the expression '[(ID) ^ (IT)] ^ [DP ^ CT]' above, ID and IT are both optional in the sense that they are not present in all instances of ED patient journey, whereas DP and CT are obligatory so that non-occurrences will be regarded as 'a marked affair' (Hasan, 1979, p. 384).

Regarding the ordering, she argues that there are two orderings in GSP, *viz.*, sequential order and reversive order. For Hasan, sequential order is marked by a carat sign '^' indicating that the two elements must appear in the order corresponding to the progression of the social activity. Reversive order, by contrast, is marked by a raised dot '•', denoting that the positions of elements could be reversed, thus resulting in more than one option in sequencing. Take '< DCⁿ > • DM ^ (F)' as an example. The expression here implies that DC comes before DM or vice-versa; and in either case, both of them are followed by an optional element F.

As for interspersions/inclusion, she recognises that an element is not always realised as a discreet unit; it can be included or interspersed with the elements next to it (Hasan, 1979, p. 382). Angle

brackets ‘ < > ’ are thus employed to highlight the discreteness of the elements, whereas square brackets ‘ [] ’ are used to delimit the interspersion and ordering. For example, the expression ‘ [(<G>) • PI] ^ AC ’ means that G is optional, and when it occurs, it either (i) occurs discretely before or after the obligatory element PI or (ii) intersperses with PI as a single unit. In either case, both of them are followed by another obligatory element AC.

The final convention that deserves to be noted is recursion/iteration, which, in Hasan’s notation, is marked by a curve arrow. For the clarity of presentation, this study employs a superscript ‘ⁿ’ as a replacement. Important in recursion is its iterative boundary. That is to say, recursive elements are not of complete freedom but are typically limited by its own boundaries. To highlight such a limit, braces ‘ { } ’ are employed. For example, the expression ‘ <HTⁿ> ^ <PEⁿ> ’ means that while both HT and PE entail recursion, they are not bounded by the same boundaries. As a result, when it comes to iteration, they do not necessarily share the same degree of iteration. If the expression <HTⁿ> ^ <PEⁿ> had been re-organised as {HT ^ PE}ⁿ, it, in a semantic sense, would have denoted a sense of recursive homogeneity – both HT and PE enjoy the same degree of iteration, that is, when HT occurs twice, then PE must occur twice.

The final point to be made about the convention here is, to a certain extent, a reconceptualisation of ‘system’ (Martin, 2004). Here, the convention ‘^x ... *a ; *b’ is read as ‘if *a* then *x* or *y*’ construct. In the GSP presented above, the conventions yield two possible conditions: (i) if D is actualised, then the following element is either AN or PT; and (ii) if AN occurs, the subsequent element is either A or PT – the former aims to highlight whether patients undergo admission negotiation whereas the latter concerns whether the negotiation is successful. A selection within

these conditions thus generates three different pathways of patient journeys. In short, these two pairs of conditional markings enable us to capture the dynamism of ED patient journeys, which, in a theoretical sense, complements the inadequacy of Hasan's linear representation of GSP formula (cf. Ventola, 1987).

7.4.2 Linguistic realisations of the elements

The previous section gave an overview of the generic elements in Category III ED patient journey in terms of context. This section focuses on the linguistic specification in terms of criteria from semantics (i.e. from roundabout) and lexicogrammar (i.e. from below). It should be emphasised that a full specification of realisation statements is of immense academic enterprise (e.g. Hasan, 2011 [1984]). Table 7.4 presents only the crucial semantic attributes and their typical lexicogrammatical realisations.

Table 7.4 Descriptions of semantic and lexicogrammatical features of generic elements in ED emergency doctor-patient communication

Generic element	Discoursal role	Crucial semantic attributes		(Lexicogrammatical) realisations
Identification (I)	doctor as questioner, patient as answerer	i) propositional messages (i.e. QUESTION ^ ANSWER ^ FOLLOW UP)		
			a) QUESTION	identifying clause; Value (i.e. patient), Token (i.e. patient's name)
			b) ANSWER	
		ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		iii) punctuative messages		minor clause of calling type, preselecting name-based Vocative
Greeting (G)	doctor as greeter, patient as addressee	i) punctuative messages		minor clause of greeting types
Allergy checking (AC)	doctor as questioner, patient as	i) propositional messages (i.e. QUESTION ^ ANSWER ^ FOLLOW UP)		

	answerer		a) QUESTION	major: interrogative:
			b) ANSWER	major: indicative: declarative
		ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		iii) experiential domain of relevant object : drug allergy		Things reference to <i>joek6 mat6 man5 gam2</i> (' <i>drug allergy</i> ')
		iv) indefiniteness i.e. the realises of the 'drug allergy' is general class of phenomenon		Possession is lexically configured as either 'bare Thing' or ' <i>classifier</i> + Thing' configuration
Problem Presentation (PP)	doctor as questioner/ listener, patient as 'answer: narrator'	i) propositional messages (i.e. QUESTION ^ ANSWER ^ FOLLOW UP)		
			a) QUESTION	major: indicative: interrogative: wh as congruent realisation
			b) ANSWER	major: indicative: declarative
		ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		iii) narrative structure (i.e. events sequence: chronicling)		conjunction: a) temporal b) additive
		iv) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) realis: prior	aspect marker: a) experiential b) perfective
				temporal adjunct (i.e. uses of time adjuncts to signal the 'experiential time of the event' is prior to the "interpersonal 'now' of speaking")
			c) spatial proximity: close	temporal adjunct (i.e. uses of time adjuncts to indicate a 'close' temporal distance)
				locative adjunct (i.e. uses of time adjuncts to indicate a 'far' locative distance)
		i) propositional messages (i.e. QUESTION ^ ANSWER ^ FOLLOW UP)		
			a) QUESTION	major: indicative (i.e. no corresponding mood choice)
			b) STATEMENT	major: indicative

History Taking (HT)	doctor as questioner, patient as answerer	ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		ii) experiential domain of relevant object : illness, including event, feeling, symptom, self-diagnosis etc.		Things reference to sickness, including <i>when, what, how</i> etc.
		iv) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) realis: prior	temporal adjunct
			c) spatial proximity: close	temporal adjunct
Physical Examination (PE)	doctor as commander, patient as compliance	i) proposal messages (i.e. COMMAND ^ COMPLIANCE ^ FOLLOW UP)		
			a) COMMAND	major: imperative
			b) COMPLIANCE	typically realised socially as material actions
		ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		iii) figure of ‘doing’		imperative clause; Actor: Patient Process type: Material
		iv) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) realis: co-current	temporal adjunct (i.e. uses of time adjuncts to signal the ‘experiential time of the event’ is concurrent with the “interpersonal ‘now’ of speaking”)
			c) spatial proximity: near	temporal adjunct (i.e. uses of time adjuncts to indicate an ‘immediate’ temporal distance)
				exophoric reference (i.e. to indicate the proximal orientation is hear-and-now)
Initial Diagnosis (ID)	doctor as addresser, patient as addressee	i) propositional messages (i.e. STATEMENT ^ ACKNOWLEDGEMENT)		major: indicative: declarative
		ii) tentativeness		hedge, interpersonal metaphor, modality and interpersonal particle of tentative type
		iii) typical dialogic management		Dr: initiate P: follow

				Dr: follow-up
		iv) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) irrealis: project	temporal adjunct
			c) spatial proximity: immediate	temporal adjunct
Immediate Treatment (Evaluation) (IT)	doctor as questioner, patient as answerer	i) propositional messages (i.e. QUESTION ^ ANSWER ^ FOLLOW UP)		
			a) QUESTION	major: indicative: interrogative: wh
			b) STATEMENT	major: indicative: declarative
		ii) typical dialogic management		Dr: initiate P: follow Dr: follow-up
		iii) figure of 'being' /attribution		relational clause, Carrier (i.e. patient), Attributive (i.e. patient's evaluation)
		iii) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) irrealis: concurrent	temporal adjunct
			c) spatial proximity: immediate	temporal adjunct
Diagnostic Plan (DP)	doctor as planner, patient as undertaker/refuser	i) propositional messages (i.e. OFFER)		no corresponding realisation
		ii) propositional messages (i.e. ACCEPTANCE/REJECTION)		major: indicative: declarative
		iii) typical dialogic management		Dr: initiate P: follow
		v) event orientation		
			a) habituality: non-habitual	presence of temporal adjunct
			b) irrealis: projected	a) temporal adjunct
				b) modal adjunct: modulation: inclination
			c) spatial proximity: immediate	temporal adjunct
Clinical Test (CT)*	Beyond the scope of this study			
Final	doctor as	i) propositional messages		major: indicative: declarative

Diagnosis (FD)	addresser, patient as addressee	(i.e. STATEMENT ^ ACKNOWLEDGEMENT)		
		ii) typical dialogic management		Dr: initiate P: follow
		iii) personalizing focus (i.e. patients are regarded as human beings and the diagnosis is patient-specific)		Things reference to patient as a whole, including personal reference i.e. <i>nei2</i> 'you'
		iv) explanatory (i.e. messages typically entails logical expansion, both <i>implicitly</i> and <i>explicitly</i>)		conjunction: a) linker b) binder
		v) assertive tone		an outclassification of hedge, interpersonal metaphor, modality and interpersonal particle of tentative type etc. + falling sentence/clausal intonation
		vi) affective tone in expressing empathy		attitudinal lexis; relational and mental processes, etc.
		vii) event orientation		
			a) habituality: non- habitual	presence of temporal adjunct
			b) realis: concurrent	temporal adjunct
			c) spatial proximity: immediate	temporal adjunct
Treatment Negotiation (TN)	doctor as proposer, patient as undertaker	i) proposal messages (i.e. OFFER ^ ACCEPTANCE / REJECTION ^ FOLLOW UP)		
		ii) propositional messages (i.e. STATEMENT)		
			a) OFFER	no corresponding realisation
			b) ACCEPTANCE / REJECTION for 'value negotiation'	major: indicative: declarative
		ii) propositional messages (i.e. STATEMENT)		major: indicative: declarative
		iii) typical dialogic management		Dr: initiate P: follow
		iv) LOGICO-SEMANTIC RELATIONS (i.e. logically expanded messages serve as medical rationales for treatment negotiation)		
			alternatives	a) a possibility of choice in terms of treatment options being negotiated b) conjunction: extending: varying: alternative i.e. <i>waak6 ze2</i> ('or')
		v) irrealis: projected		modal adjunct:

		concerning what <i>might</i> be/can be choose, rather than what <i>it is</i>	modalisation: probability
Prospective Treatment (PT)	doctor as answerer/ addresser, patient as questioner/a ddessee	i) propositional messages (a) QUESTION ^ ANSWER ^ FOLLOW UP (b) STATEMENT ^ ACKNOWLEDGEMENT	
		a) STATEMENT	major: indicative: declarative
		b) QUESTION	major: indicative: interrogative
		ii) typical dialogic management	Dr : initiate P: follow Dr: follow-up
		iii) experiential domain of relevant object: medication details	Things reference to drug name, functions, guidelines etc.
		iv) event orientation	
		a) habituality: non-habitual	presence of temporal adjunct
		b) irrealis: projected	temporal adjunct, modal adjunct: modulation: inclination
		c) spatial proximity: distal	temporal adjunct
Discharge (DC)	Varied discorsal roles	i) propositional messages (a) QUESTION ^ ANSWER ^ FOLLOW UP (b) STATEMENT ^ ACKNOWLEDGEMENT/CONTRADICTION (c) COMMAND ^ ACCEPTANCE/REJECTION	
		a) STATEMENT	major: indicative: declarative
		b) QUESTION	major: indicative: interrogative
		c) COMMAND	major: imperative
			major: indicative: declarative (i.e. interpersonal metaphor)
		ii) typical dialogic management	Dr: initiate P: follow Dr: follow-up
		iii) LOGICO-SEMANTIC RELATIONS (i.e. logically expanded messages serve as explanations of patient enquiry)	
		a) enhancement	(i) conjunction: enhancing: causal-conditional
			(ii) conjunction: enhancing: hypothetical condition
		(iv) realis focus: present	temporal adjunct
		i) proposal messages (i.e. OFFER ^ ACCEPTANCE / REJECTION ^ FOLLOW UP)	
		a) OFFER	no corresponding realisation
		b) ACCEPTANCE / REJECTION for 'value negotiation'	major: indicative: declarative

Admission Negotiation (AN)	doctor as proposer, patient as undertaker		
		ii) propositional messages (i.e. STATEMENT)	major: indicative: declarative
		iii) typical dialogic management	Dr : initiate P : follow Dr: follow-up
		iv) LOGICO-SEMANTIC RELATIONS (i.e. logically expanded messages serve as medical rationales for admission negotiation)	
		alternatives	conjunction: extending: varying: alternative i.e. <i>waak6 ze2</i> ('or')
		iv) irrealis: projected concerning what <i>might</i> be/can be choose, rather than what <i>it is</i>	modal adjunct: modalisation: probability
Dismissal (DM)	doctor as addresser, patient as addressee	(i) propositional messages (i.e. STATEMENT ^ ACKNOWLEDGEMENT/CONTRADICTION)	
		a) STATEMENT	major: indicative: declarative
		(ii) proposal messages (i.e. COMMAND ^ COMPLIANCE ^ FOLLOW UP)	
		b) COMMAND	major: imperative
		ii) typical dialogic management	Dr : initiate P : follow
		iv) personalizing focus (i.e. patients are regarded as human beings and the diagnosis is patient-specific)	Things reference to patient as a whole, including personal reference i.e. <i>nei2</i> 'you'
		v) irrealis focus: projected	temporal adjunct
Finale (F)	doctor as greeter, patient as addressee	i) punctuative messages	minor clause of greeting types

7.5 Characterising the structure of patient journey – a view of AGS

Whereas Section 7.4 concerns *meaning-as-system*, viewing the structural meaning from the point of view of GSP, this section focuses on *meaning-as-instance*, viewing it from the Hasan's notion of AGS. As set out in Section 7.2, one of the pressing issues in undertaking a GSP analysis is to understand the meanings of registerial structure in ED consultations, illustrating how the identification of structural constituents could contribute to an understanding of, on the one hand, the enactment of the 'acts of meaning' of interlocutors within generic elements (cf. 'localized meaning' in Hasan, 2011, p. xxvii), and on the other hand, the overall schema of the communicative process between doctors and patients (cf. 'text-wide meaning' in Hasan, 2011 p. xxvii). The view of AGS thus illustrates how the registerial structural potential is instantiated as instance, illustrating how the interplay between the localized meaning (i.e. meaning-as-process) and text-wide meaning (i.e. meaning-as-product) in context.

7.5.1 Meaning-as-process: the two crucial phases in Crystal's patient journey

Section 7.5.1 is about meaning-as-process, illustrating how the localized meanings are manifested through a calibration of context, semantics and lexicogrammar within the structural sequencing of generic elements. To illustrate, I would turn to Crystal's patient journey as a case study. Text 7.1 illustrates the generic structure of Crystal's patient journey.

Text 7.1 Generic Structure of Crystal's patient journey

Key

Participant

D: Doctor

P: Crystal

Context

Crystal felt dizzy and chest pain when she woke up in the morning. She was admitted to Tuen Mun hospital A&E department, and subsequently triaged as Category III. She was a patient of panic disorder.

Activity Stage 1: Initial Medical Consultation

Generic element	Turn	S	Cantonese Messages	English Translation
Identification (I)	154	D	(1) Crystal	(1) Crystal
Identification (I)	155	P	(2) hai6 hai6 hai6 hai6	(2) Ye-ye-ye-yes.
Greeting (G)	156	D	(3) nei5 hou2	(3) Hello.
Allergy Check (AC)	156	D	(4) jau5 mou5 joe6 mat6 man5 gam2 aa3 ?	(4) Do you have any drug allergies?
Allergy Check (AC)	157	P	(5) e6...jau5 aa3	(5) Ah... yes,
Allergy Check (AC)	157	P	(6) jau5 zek3 tau4 wan4 go2 di1	(6) There's one type for dizziness,
Allergy Check (AC)	158	D	(7) dim2 wan4 gaa3 ?	(7) Dizzy how?
Allergy Check (AC)	159	P	(8) e6..., ngo5 sik6 zo2 keoi5 ne1,	(8) Ah... I take this,
Allergy Check (AC)	159	P	(9) wui2, e6, go3 zeoi2 me2 gaa3	(9) my mouth would, ah, twist to one side.
Allergy Check (AC)	159	P	(10) e6 ni1 zek3	(10) Ah, this one.
Allergy Check (AC)	160	D	(11) zeoi2 me2?	(11) Your mouth twists?
Allergy Check (AC)	160	D	(12) me2 maai4 jat1 bin6 aa4 ?	(12) Twists to one side?
Allergy Check (AC)	161	P	(13) hai6 aa3 hai6 aa3 !	(13) Right-Right!

Allergy Check (AC)	162	D	(14) o2—o2—o2。	(14) Uh—uh—uh.
Allergy Check (AC)	162	D	(15) hou2 laa1。	(15) Okay!
Problem Presentation (PP)	163	D	(16) gin3 me1 si6 aa3?	(16) What's the matter?
Problem Presentation (PP)	164	P	(17) e6... ngo5 gam1 ciu4 cat1 dim2 zung1 hei2 san1 ne1	(17) Ah... when I got up at seven o'clock this morning,
Problem Presentation (PP)	164	P	(18) zau6 tau4 wan4 laa3,	(18) I was dizzy
Problem Presentation (PP)	164	P	(19) go3 jan4 ne1 dam4 dam4 zyun2 gam2 joeng2	(19) like I was spinning and such.
Problem Presentation (PP)	165	D	(20) m6,	(20) Mm,
Problem Presentation (PP)	165	D	(21) hou2 aa3	(21) okay.
History Taking (HT)	165	D	(22) cat1 dim2 zung1 hei2, hai6 mai1 aa3?	(22) At seven o'clock you==woke up, right?
History Taking (HT)	166	P	(23) ==hei2—hei2 cong4.	(23) ==Out—out of bed.
History Taking (HT)	167	D	(24) == jau5 mou5 bat1 sing2 jan4 si6 go2 di1 aa3 ?	(24) ==Did you pass out and such?
History Taking (HT)	168	P	(25) zik1 hai6 dou1 cing1 sing2	(25) I mean, still awake,
History Taking (HT)	168	P	(26) daan6 hai6 hang4 hei2 soeng6 lai4 ne1	(26) but when I walked,
History Taking (HT)	168	P	(27) zau6 zong1 haa2 zong1 haa2.	(27) I dipped and dipped.
History Taking (HT)	169	D	(28) jau5 mou5 au2 dou3 gam2 joeng2 aa1 ?	(28) Did you vomit or something ?
History Taking (HT)	170	P	(29) e6 , mei6 jau5 au2.	(29) Ah, not yet.
History Taking (HT)	171	D	(30) dou1 hai6 hang4 dak1 dou2 ge3	(30) You were still ambulatory.
History Taking (HT)	171	D	(31) jau5 mou5 dit1 gwo3 aa3 gam2 joeng2?	(31) Did you fall or something?
History Taking (HT)	172	P	(32) dou1 jiu3 fu4 zyu6 aa3.	(32) I needed support.
History Taking (HT)	173	D	(33) o6.	(33) Uh.
History Taking (HT)	173	D	(34) jau5 mou5 dou3 ham2 dou3 tau4?	(34) Did you hit your head?
History Taking (HT)	174	P	(35) e6, go2 di1 mou5.	(35) Ah... not that kind of thing.
History Taking (HT)	175	D	(36) mou5.	(36) No.
History Taking (HT)	175	D	(37) nei1 gei2 jat6 jau5 mou5 sam1 hau2 m4 syu1 fuk6 aa1?	(37) Did your chest feel uncomfortable these few days?
History Taking (HT)	176	P	(38) m6... daan6 hai6 nei4 paai4 ne1 - zik1 hai6 go3 sam1 ne1 zau6 hou2 hing3 gam2 joeng2 lo1 。	(38) Mm... But these days my chest feels like burning or something.
History Taking (HT)	177	D	(39) daan6 hai6 mou5 waa6 tung3 go2 di1 ge3==	(39) But did you feel pain==
History Taking (HT)	177	D	(40) ai3 zyu6 go2 di1 ge3 mou5 ge3?	(40) or tight around the chest?
History Taking (HT)	178	P	(41) ==mou5 !	(41) ==No!
History Taking (HT)	178	P	(42) ai3 zyu6 jau5 。	(42) Tight, yes.
History Taking (HT)	178	P	(43) sam1 hing3	(43) My chest burned
History Taking (HT)	178	P	(44) tung4 maai4 ai3 zyu6 。	(44) and felt tight.
History Taking (HT)	178	P	(45) tung4 maai4 ne1 tiu4 lei6 ne1 , hou2 ci5 hou2 laa5 zyu6 gam2 joeng2 lo1 。	(45) And my tongue, like, felt very tight.

History Taking (HT)	179	D	(46) sau2 goek3 jau5 mou5 m4 syu1 fuk6?	(46) Anything uncomfortable with your limbs?
History Taking (HT)	179	D	(47) jau5 mou5 waa6 jat1 bin1 sau2 mou5 lik6?	(47) Does one of your arms feel limp?
History Taking (HT)	180	P	(48) mou5 。	(48) No.
History Taking (HT)	180	P	(49) daan6 hai6 ji4 gaa1 ne1 zek3 goek3 — jau6 m4 zi1 hai6 mai6 co5 dak1 go2 gaa3 tau4 sin1 sap6 zi6 ce1 noi6 ne1 ,	(49) But now this leg—not sure if it’s because I was in the ambulance just now for so long,
History Taking (HT)	180	P	(50) ji4 gaa1 goek3 hou2 bei3 lo1 。	(50) my legs now feel very numb.
History Taking (HT)	181	D	(51) gam2 jau6 mei6 bit1 gwaan1 si6 ge2 。	(51) Now that might not be relevant.
History Taking (HT)	182	P	(52) hai6 lo1	(52) Right
History Taking (HT)	183	D	(53) hai6 lo1	(53) Right
History Taking (HT)	183	D	(54) o1 au2 go2 di1 zau6 mou5 laa1?	(54) You didn’t vomit or have the runs?
History Taking (HT)	183	D	(55) tau4 sin1 gong2 zo2 。	(55) We talked about it.
History Taking (HT)	184	P	(56) aa3 , go2 di1 zau6 mou5 。	(56) Ah, nothing of the sort.
History Taking (HT)	185	D	(57) daai6 bin6 jau5 mou5 o1 hyut3 aa3?	(57) Any bleeding when you pass stool?
History Taking (HT)	186	P	(58) mou5 aa3	(58) No,
History Taking (HT)	186	P	(59) daai6 bin6 m4 hai6 hou2 coeng3 tung1==aa3 zan1 hai6 。	(59) not so smoothly though==really.
History Taking (HT)	187	D	(60) == nei5 jau5 mou5 sik6 zo2 di1 me1 joek6 gaau2 dou3 wan4 aa3?	(60) ==Did you take any meds that made you dizzy?
History Taking (HT)	188	P	(61) mou5 aa3 。	(61) No.
History Taking (HT)	188	P	(62) le2 ngo5 lam4 fan3	(62) Ah, before going to bed
History Taking (HT)	188	P	(63) zau6 wui2 sik6 jat1 nap1 on1 min4 joek6 lo1 。	(63) I’d take a sleeping pill.
History Taking (HT)	189	D	(64) ng6,	(64) Mm,
History Taking (HT)	189	D	(65) hou2 aa3.	(65) right.
History Taking (HT)	189	D	(66) zik1 hai6 bat1 lau1 sik6 hoi1 gaa3 laa1 ?	(66) That means you take it regularly?
History Taking (HT)	190	P	(67) hai6 aa3 hai6 aa3 !	(67) Right–Right!
History Taking (HT)	191	D	(68) zuk1 sat6 ngo5	(68) Hold on to me tight
History Taking (HT)	191	D	(69) tai2 haa6 jau5 mou5 lik6 sin1?	(69) and see if you can exert force
History Taking (HT)	192	D	(70) daan6 hai6 nei5 sik6 kei4 taa1 zi2 wan4 joek6	(70) But when you take other types of meds for dizziness,
History Taking (HT)	192	D	(71) wui2 m4 wui2... gam2 joeng6 aa3? 。	(71) will you... feel this way?
History Taking (HT)	192	D	(72) zik1 hai6 [...] nei5 jan1 wai6 go2 zek3 joek6 hou2 do1 jan4 dou1 jau5 wo3	(72) I mean [...] many folks have the same meds as you.
History Taking (HT)	193	P	(73) hai6 aa3	(73) Right,
History Taking (HT)	193	P	(74) jan1 wai6 ngo5 hai6 hai2 ji1 jyun2,	(74) because it’s from this hospital,
History Taking (HT)	193	P	(75) ngo5 dou1 lyut3 gwo3==gaa3 laa3 。	(75) I got it [the medication]==too.

History Taking (HT)	194	D	(76) ==hou2 aa3 °	(76) ==Good.
History Taking (HT)	194	D	(77) nei5 jau5 mou5 hyut3 aat3 gou1 gaa3 bun2 san1?	(77) Do you have hypertension?
History Taking (HT)	195	P	(78) ngo5... soeng6 nin2 sap6 jat1 jyut6 jim6 gwo3 ne1	(78) O... had a check last November...
History Taking (HT)	195	P	(79) zau6... mou5 hyut3 aat3 gou1	(79) I didn't have hypertension then
History Taking (HT)	195	P	(80) daan6 hai6 jau5 daam2 gu3 seon4.	(80) but I had high cholesterol.
History Taking (HT)	196	D	(81) m6,	(81) Mm,
History Taking (HT)	196	D	(82) hou2 aa3.	(82) I see.
History Taking (HT)	196	D	(83) ni1 go3 me1 lai4 gaa?	(83) What's this?
History Taking (HT)	197	P	(84) ni1 go3 ne1 zau6 hai6 go2 di1 ei6...	(84) Oh, this is those ah...
History Taking (HT)	197	P	(85) ngo5 jat6 jat6 dou1 jiu3 sik6 ge3, go2 di1 zan3 ding6 jyun4 tung4 maai4 sam1 tiu3 lai4 ge3.	(85) I have to take this every day, some sedative and meds to keep my heartbeat in check.
History Taking (HT)	198	D	(86) m6 °	(86) Mm.
History Taking (HT)	199	P	(87) jan1 wai6 ngo5 jau5 go2 go3 ging1 ok3 zing3 aa3.	(87) Because I have that panic disorder.
History Taking (HT)	200	D	(88) hou2 aa3,	(88) Right,
History Taking (HT)	200	D	(89) nei5 lyut3 faan1 aa1.	(89) take it back.
History Taking (HT)	200	D	(90) gam2 nei5 wui2 m4 wui2 hou2 geng1 aa1 ji4 gaa1?	(90) ==Now are you feeling very nervous?
History Taking (HT)	201	P	(91) ==aa3	(91) ==Ahh
History Taking (HT)	202	P	(92) ji4 gaa1 m4 hai6 dim2 ging1 aa1 ,	(92) Not quite nervous now,
History Taking (HT)	202	P	(93) keoi5 tung4 ngo5 king1 haa2 gai3 jau6 mou5 gaa3 wo3.	(93) he [researcher] and I had a little chat and it [the panic] wasn't there.
Turn 203 to Turn 215 omitted				
Physical Examination (PE)	216	D	(94) teng1 jat1 teng1 sin1, hou2 mou5 ?	(94) Now, let's listen [to your chest] first, okay?
Physical Examination (PE)	217	P	(95) hou2 aa3 hou2 aa3.	(95) Okay-okay.
Physical Examination (PE)	218	D	(96) ping4 jat6 jau5 mou5 wan4 gaa3 ?	(96) Do you commonly feel dizzy?
Physical Examination (PE)	219	P	(97) jau5 ,	(97) Yeah,
Physical Examination (PE)	219	P	(98) jau5 si4==dou1 jau5 gaa3.	(98) sometimes==yeah.
Physical Examination (PE)	220	D	(99) ==dou1 wui2 gam2 joeng6 gaa3.	(99) ==You feel that way.
Physical Examination (PE)	221	P	(100) so2 ji5 ngo5 doi6 ding6 nap1 zi2 wan4 jyun4 gaa3 °	(100) So I have some anti-fainting pills in my bag.
Physical Examination (PE)	222	D	(101) hou2 aa3.	(101) Alright,
Physical Examination (PE)	222	D	(102) teng1 haa2 sin1 °	(102) let's hear it out.
[The doctor examined Crystal for around 16 seconds]				
History Taking (HT)	223	D	(103) nei5 go3 tou5 jau5 mou5 m4 syu1 fuk6 aa3?	(103) Does your stomach feel queasy?
History Taking (HT)	224	P	(104) ngo5 go3 tou5 ni1 paai4 hou2 zoeng3 lo1!	(104) It feels very bloated lately!

History Taking (HT)	225	D	(105) hou2 zoeng3?	(105) Bloating?
History Taking (HT)	225	D	(106) == jau5 si2 o1 gaa1 maa3 , hai6 mai1 aa3?	(106) You pass stool [regularly] right?
History Taking (HT)	226	P	(107) == sik6 m4 lok6 je5 aa3 .	(107) ==I lost appetite.
History Taking (HT)	227	P	(108) daan6 hai6 di1 daai6 bin6 hou2 ngaang6 lo1!	(108) But the stool is so hard!
History Taking (HT)	227	P	(109) hou2 naan4 o1 dak1 ceot1 lo1!	(109) So hard to get it out!
History Taking (HT)	228	D	(110) gam2 nei5 wui2 m4 wui2 hou2 geng1 aa3 gam1 jat6?	(110) Then do you feel anxious today?
History Taking (HT)	229	P	(111) gam1 jat6 wan4 go2 si4 aa1	(111) When I felt dizzy today,
History Taking (HT)	229	P	(112) geng1 aa3!	(112) I was anxious!
History Taking (HT)	230	D	(113) hai6 aa3,	(113) Right
History Taking (HT)	230	D	(114) gam2 joeng2.	(114) I see
History Taking (HT)	231	P	(115) hai6 aa3.	(115) Right.
History Taking (HT)	232	D	(116) zik1 hai6... m4 hai6 ging1 jan5 hei2 ge3, hai6 mai6 aa3?	(116) That means... It's not related to panic, right?
Physical Examination (PE)	232	D	(117) sau2 zi2 jat1 zek3 nei5 mong6 m4 mong6 dou2?	(117) Can you see my finger ?
Physical Examination (PE)	233	P	(118) mong6 dou2.	(118) I can.
Physical Examination (PE)	234	D	(119) mong6 zyu6 aa1,	(119) Look,
Physical Examination (PE)	234	D	(120) jau5 mou5 bin3 zo2 gei2 zek3 aa3 ?	(120) would you see a few more?
Physical Examination (PE)	235	P	(121) ji4 gaa1 jau6 mou5.	(121) Not now.
Physical Examination (PE)	236	D	(122) jat1 zek3?	(122) Just one?
Physical Examination (PE)	237	P	(123) haa6.	(123) Yes
Physical Examination (PE)	238	D	(124) sau2 zi2 dim1 gwo3 lei4.	(124) Touch your finger to.
Physical Examination (PE)	238	D	(125) dim3 m4 dim3 dou2 bei6 go1?	(125) Can you touch your nose?
Physical Examination (PE)	238	D	(126) cung5 fuk1 zou6 aa1.	(126) Do it again.
Physical Examination (PE)	238	D	(127) hai6 laa3 ,	(127) Right.
Physical Examination (PE)	238	D	(128) ni1 go3 si3 haa2.	(128) Try this.
Physical Examination (PE)	238	D	(129) dim1 gwo3 lai4,	(129) Move it,
Physical Examination (PE)	238	D	(130) dim3 bei6 go1.	(130) Touch the nose.
Physical Examination (PE)	238	D	(131) tai2 je5 jau5 mou5 waa6 mung4 sai3	(131) Did things blur?
Physical Examination (PE)	238	D	(132) tai2 m4 dou3 gam2 joeng2 aa3	(132) Can you see?
Physical Examination (PE)	239	P	(133) gam1 ciu4 wan4 go2 zan2 si4	(133) When I felt dizzy this morning,
Physical Examination (PE)	239	P	(134) zau6 wui2 laa3.	(134) it was.
Physical Examination (PE)	240	D	(135) ji4 gaa1 jau5 mou5?	(135) Is it happening now?
Physical Examination (PE)	241	P	(136) ji4 gaa1 hou2 — hou2 hou2==do1.	(136) Now it's better—much, much==better.
History Taking (HT)	242	D	(137) == nei5 zou6 gan2 me1 gaa3,	(137) ==What were you doing,
History Taking (HT)	242	D	(138) nei5 wan4 go2 zan6 si4 , gam1 ziu1	(138) when you felt dizzy this morning?
History Taking (HT)	243	P	(139) ngaam1 ngaam1 hei2 san1.	(139) Just out of bed.

History Taking (HT)	244	D	(140) o6.	(140) Uh.
History Taking (HT)	244	D	(141) wui2 m4 wui2 juk1 haa2 go3 tau4	(141) Did you feel dizzy
History Taking (HT)	244	D	(142) zau6 wan4 aa1?	(142) just moving your head?
History Taking (HT)	245	P	(143) e6... juk1 haa2	(143) Ah... moved just slightly
History Taking (HT)	245	P	(144) dou1 wui2 aa3 °	(144) I felt dizzy.
History Taking (HT)	246	D	(145) jau5 mou5 gam2 mou6 aa3 , ni1 gei2 jat6?	(145) Got a flu these few days?
History Taking (HT)	247	P	(146) e6... mou5 wo3.	(146) Ah... No.
History Taking (HT)	247	P	(147) jau6 mou5 gam2 mou6 wo3.	(147) Didn't have a cold.
History Taking (HT)	248	D	(148) hai6 aa3.	(148) Right.
History Taking (HT)	248	D	(149) ni1 go3 lai5 baai3, waak6 ze2 soeng6 go3 lai5 baai3 jau5 mou5 aa1?	(149) How about this week, or last week, did you?
History Taking (HT)	249	P	(150) e6... dou1 mou5 °	(150) Ah... no either.
History Taking (HT)	250	D	(151) dou1 mou5 °	(151) No either.
Physical Examination (PE)	250	D	(152) tai2 maai4 go3 ji5 zai2 jau5 mou5 je5 jing2 hoeng2 dou2 , hou2 mou5?	(152) Let's see if your ears are affected, alright?
Physical Examination (PE)	251	P	(153) ng6 °	(153) Mm.
Physical Examination (PE)	252	D	(154) teng1 je5	(154) When you hear,
Physical Examination (PE)	252	D	(155) jau5 mou5 wang1 wang1 seng1?	(155) do you hear any echo?
Physical Examination (PE)	253	P	(156) mung4 di1 lo1,	(156) Ah... a bit vague,
Physical Examination (PE)	253	P	(157) teng1 nei5 gong2 je5 zau6.	(157) when I listen to you talking.
Physical Examination (PE)	254	D	(158) ji5 zai2 zau6 mou5 mat1 je5.	(158) Nothing wrong with your ears.
Physical Examination (PE)	255	P	(159) daan6 hai6 waa6 ni1 paai4 nel1 zau6 hou2 ci5 hou2 sam1 fo2 sing6 gam2 joeng2 joeng2 aa3.	(159) But lately I felt my heart was burning and such
Diagnostic Plan (DP)	256	D	(160) tung4 nei5 zou6 di1 gim2 caa4 sin1, hou2 mou5?	(160) Let's get some checks done, alright?
Diagnostic Plan (DP)	257	P	(161) o6 °	(161) Uh.
Diagnostic Plan (DP)	258	D	(162) hai6 laa3 ,	(162) Right,
Diagnostic Plan (DP)	258	D	(163) gam2 ngo5 nel1 dou1 tung4 nei5 zou6 maai4 sam1 din6 tou4 tai2 haa2 ,	(163) let me get you an electrocardiogram,
Diagnostic Plan (DP)	258	D	(164) jim6 haa2 di1 hyut3 tong4 go2 di1 ° gam2 jan1	(164) take a look at your blood sugar and such.
Diagnostic Plan (DP)	258	D	(165) wai6 nei5 hyut3 aat3 jau5 di1 gou1 ,	(165) Because your blood pressure is a bit high,
Diagnostic Plan (DP)	258	D	(166) jat1 zan6 loeng4 do1 ci3 °	(166) we'll measure it again later.
Diagnostic Plan (DP)	258	D	(167) nei5 fong3 sung1 di1 bei2 ngo5 dei6 loeng4 haa2 °	(167) Relax for us to measure it.
Diagnostic Plan (DP)	258	D	(168) gam2 ngo5 gok3 dak1 wan4 go2 dou6 ngo5 zau6 m4 hai6 taai3 daam1 sam1 ge3 ,	(168) Well I think when it comes to your dizziness, I'm not that worried,

Diagnostic Plan (DP)	258	D	(169) jan1 wai6 go2 di1 ho2 ji5 sik6 joek6 ◦	(169) because there are meds for that.
Diagnostic Plan (DP)	258	D	(170) nei5 waa6 gun1 caat3 , jan1 wai6 zaam6 si4 nei5 jau6 mou5 mat1 daai6 beng6 zing1 ,	(170) As for observation, you don't have any serious symptoms,
Diagnostic Plan (DP)	258	D	(171) bat1 gwo3 jyu4 gwo2 nei5 waa6 zan1 hai6 wan4 dak1 hou2 sai1 lei6 ne1 ,	(171) though if you feel really dizzy,
Treatment Negotiation (TN)	258	D	(172) nei5 soeng2 m4 soeng2 ngo5 bei2 nap1 zi2 wan4 joek6 nei5 si3 haa2 aa3?	(172) do you want me to prescribe some anti-fainting pills for you?
Treatment Negotiation (TN)	259	P	(173) ==zik1 hai6...	(173) ==That means...
Treatment Negotiation (TN)	260	D	(174) ==ji4 gaa1 sik6 lap1 zi2 wan4 joek6 ◦	(174) ==Take an anti-fainting pill right now.
Treatment Negotiation (TN)	261	P	(175) hai6 aa1 ,	(175) Yes
Treatment Negotiation (TN)	261	P	(176) jiu3 aa3 ◦ ngo5...	(176) , I do. ==I...
Treatment Negotiation (TN)	262	D	(177) ==hai6 maa3 !	(177) ==Right!
Treatment Negotiation (TN)	263	D	(178) gun1 caat3 haa2 ,	(178) We will observe you;
Treatment Negotiation (TN)	263	D	(179) sik6 nap1 joek6 lo1 ◦	(179) take a pill.
Treatment Negotiation (TN)	263	D	(180) == jan1 wai6 ngo5 geng1 nei5 go2 di1 zi2 wan4 joek6 - jyu4 gwo2 waa6 me1 zeoi2 me2 zo2 ,	(180) ==Because I'm worried that the dizziness relieving pill – if your mouth twists
Treatment Negotiation (TN)	263	D	(181) ngo5 geng1 daa2 zam1 nei5 wui2 bei2 gaau3 koeng4 ge3 faan2 jing3 ◦	(181) I'm worried that you may have stronger reactions to injection.
Treatment Negotiation (TN)	263	D	(182) gam2 ngo5 bei2 nap1 e6... dai6 ji6 jat1 zek3 – dai6 ji6 zek3 gei3 zi2 wan4 joek6 nei5 si3 jat1 si3 ,	(182) Now I prescribe, ah... another—a type—another type of pill for you to try,
Treatment Negotiation (TN)	263	D	(183) hau2 fuk6 ge3 ◦	(183) an oral pill .
Treatment Negotiation (TN)	264	P	(184) ==hai6 aa3 hai6 aa3 ◦	(184) ==Right—right.
Treatment Negotiation (TN)	265	D	(185) gam2 ngo5 zou6 di1 gim2 caa4 sin1 ◦	(185) Now I'll do some checking first.
Diagnostic Plan (DP)/ Physical Examination (PE)	265	D	(186) gam2 nei5 wan4 dak1 sai1 lei6 hai6 mai6 aa3?	(186) You feel very dizzy, right? D
Diagnostic Plan (DP)/ Physical Examination (PE)	265	D	(187) ji4 gaa1 wan4 m4 wan4 aa1?	(187) or you feel dizzy now?
Diagnostic Plan (DP)/ Physical Examination (PE)	266	P	(188) ji4 gaa1 zo6 hai2 dou3	(188) Now I'm sitting down
Diagnostic Plan (DP)/ Physical Examination (PE)	266	P	(189) zau6 ==dou1 – dou1 siu2 siu2 ◦	(189) still==a little bit.
Diagnostic Plan (DP)/ Physical Examination (PE)	267	D	(190) == nei5 kei5 hai2 dou3	(190) ==Stand up
Diagnostic Plan (DP)/ Physical Examination (PE)	267	D	(191) tai2 haa2 jau5 mou5 ◦	(191) and see if there you do.

Diagnostic Plan (DP)/ Physical Examination (PE)	268	P	(192) naa4 , gam1 ziu1 jat1 hei2 san1 ne1 ,	(192) Now, when I woke up this morning,
Diagnostic Plan (DP)/ Physical Examination (PE)	268	P	(193) gam2 joeng2 ne1 zau6 wan4 laa3.	(193) I felt dizzy like this.
Diagnostic Plan (DP)/ Physical Examination (PE)	269	D	(194) o6.	(194) Oh.
Diagnostic Plan (DP)/ Physical Examination (PE)	269	D	(195) hang4 loeng5 bou6	(195) Take a few steps
Diagnostic Plan (DP)/ Physical Examination (PE)	269	D	(196) tai2 haa2 °	(196) and see.
Diagnostic Plan (DP)/ Physical Examination (PE)	270	D	(197) ji4 gaa1 jau6 m4 hai6 gam2 caa1 wo3 °	(197) It doesn't look that bad.
Diagnostic Plan (DP)/ Physical Examination (PE)	271	P	(198) hai6 aa3,	(198) Right,
Diagnostic Plan (DP)/ Physical Examination (PE)	271	P	(199) ji4 gaa1	(199) not bad now
Diagnostic Plan (DP)	272	D	(200) tai2 maa4 go3 hyut3 aat3 tai2 haa6 dim2 sin1 laa1,hou2 mou5 aa3?	(200) Let's see how things go with the blood pressure, alright?
Diagnostic Plan (DP)	272	D	(201) hai6 lo1.	(201) Right.
Diagnostic Plan (DP)	272	D	(202) jyu4 gwo2 zan1 hai6 e6...hyut3 aat3 joeng6 joeng6 je5 dou1 okay ge3,	(202) If it's really... [If] things are okay with the blood pressure and everything,
Diagnostic Plan (DP)	272	D	(203) mei6 bit1 jiu3 nei5 lau4 dai1 gun1 caat3 ge3.	(203) you may not have to stay for observation.
Immediate Treatment (IT)	273	D	(204) hou2 °	(204) Good.
Diagnostic Plan (DP) / Physical Examination (PE)	273	D	(205) gam2 ngo5 dei6 zoi3 tai2 jat1 tai2 laa1 zan6 gaan1,hou2 mou5?	(205) Now we'll take a second look later, okay?
Diagnostic Plan (DP) / Physical Examination (PE)	273	D	(206) hai6 lo1.	(206) Right.
	273	D	(207) zou6 faan1 hyut3 tong4	(207) Let's check the blood sugar
Diagnostic Plan (DP)	274	P	(208) daan6 hai6 ngo5 gam1 ciu4 mei6 sik6 gwo3 je5 aa3.	(208) But I haven't eaten anything this morning.
Diagnostic Plan (DP)	275	D	(209) o2 °	(209) Uh.
Diagnostic Plan (DP)	275	D	(210) m4 gan2 jiu3 gaa3 !	(210) Never mind!
Diagnostic Plan (DP)	275	D	(211) aan3 di1 sik6 faan1 lo1 , hou2 mou5?	Eat something after, okay?
Diagnostic Plan (DP)	275	D	(212) hyut3 tong4 wui2 m4 wui2 taai3 dai2 ne1 ?	Would your blood sugar be too low?
Diagnostic Plan (DP)	275	D	(213) ngo5 mou5 sik6 mat6 aa3 ni1 dou6. hou2 mou5?	I don't have any food here, alright?
Diagnostic Plan (DP)	275	D	(214) dang2 zan6 laa1.	Wait for a while.

Diagnostic Plan (DP)	275	D	(215) zou6 gim2 caa4	For the checks
Diagnostic Plan (DP)	275	D	(216) == zyun2 tau4 wan2 faan1 nei5.	==I'll come for you in a moment.
Diagnostic Plan (DP)	276	P	(217) hou2 aa1 hou2 aa1 hou2 aa1.	Right-right-right.
Diagnostic Plan (DP)	277	D	(218) ho2 m4 ho2 ji5 bei2 zoeng1 zi2 ngo5 tai2 nei1?	Can I have a look at the sheet?
Diagnostic Plan (DP)	277	D	(219) me1 man5 gam2 aa3,	The allergies,
Diagnostic Plan (DP)	277	D	(220) ngo5 bong1 nei5 caau1 faan1 dai1 lok6 din6 nou5, hou2 mou5?	I'll enter them into the computer for you, okay?
Diagnostic Plan (DP)	278	P	(221) o6 ,	Ah,
Diagnostic Plan (DP)	278	P	(222) hou2 aa3—hou2 aa3—hou2 aa3	okay-okay-okay-okay.
Diagnostic Plan (DP)	279	D	(223) zyun2 tau4 waan4 faan1 bei2 nei5 aa1 , jat1 zan6 gaan1 .	Will give it back to you in a moment, later.
Clinical Test (CT)/ Small Talk	280	D	(224) nei5 ji5 cin4 jau5 mou5 gam2 wan4 gwo3 gaa3?	You ever felt dizzy this way?
Clinical Test (CT)/ Small Talk	281	P	(225) jau5 aa3 !	I did!
Clinical Test (CT)/ Small Talk	282	D	(226) dou1 gaan3 m4 zung1 ge3 .	On occasion.
Clinical Test (CT)/ Small Talk	283	P	(227) hai6 aa3 hai6 aa3 °	Right-right.
Clinical Test (CT)/ Small Talk	284	D	(228)hou2 aa1 ,	Okay,
Clinical Test (CT)/ Small Talk	284	D	(229) gam2 dang2 zan6 laa1 °	Now wait a while.

Activity Stage II: Final Medical Consultation

Generic element	Turn	S	Cantonese Messages	English Translation
Identification (I)	473	D	(220) Crystal ,	(220) Crystal.
Identification (I)	474	P	(221) o6 , hai6 aa3 ,	(221) Uh, right.
Identification (I)	475	D	(222) giu3 me1 meng2?	(222) What's your name?
Identification (I)	476	P	(223) Crystal ,	(223) Crystal.
Final Diagnosis (FD)	477	D	(224) zou6 zo2 sam1 din6 tou4	(224) You did an electrocardiogram;
Final Diagnosis (FD)	477	D	(225) zing3 soeng4,	(225) it's normal.
Final Diagnosis (FD)	478	P	(226) o6 °	(226) Uh.

Final Diagnosis (FD)	479	D	(227) hyut3 tong4 tung4 hyut3 sik1 sou3 dou1 zing3 soeng4,	(227) Blood sugar and haemoglobin are normal too.
Final Diagnosis (FD)	497	D	(228) gam2 ho2 nang4 nei5 lai4 dou3 ne1	(228) Perhaps when you got here just now,
Final Diagnosis (FD)	497	D	(229) gan2 zoeng1 di1 waa1 tau4 sin1 .	(229) you were a bit anxious
Final Diagnosis (FD)	498	P	(230) ng6 ,	(230) Mm.
Final Diagnosis (FD)	499	D	(231) gam2 lai4 dou3 go2 hyut3 aat3 heoi3 dou3 jat1 baak3 gau2 sap6 gei2 jau6	(231) Now the blood pressure has reached around 190,
Final Diagnosis (FD)	499	D	(232) bei2 gaau3 gou1 laa1 .	(232) that's relatively high.
Final Diagnosis (FD)	500	P	(233) m6 .	(233) Mm.
Final Diagnosis (FD)	501	D	(234) gam2 nei5 kei4 sat6 ho2 nang4 wan2 zan6 ,	(234) Well actually, you may be stable now,
Final Diagnosis (FD)	501	D	(235) ze1 hai6 ji4 gaa1 mou5 gam2 wan4 ne1 ,	(235) that means you're not that dizzy now,
Final Diagnosis (FD)	501	D	(236) hyut3 aat3 dou1 zing3 soeng4 faan1 ,	(236) your blood pressure gets to the normal range,
Final Diagnosis (FD)	501	D	(237) jat1 baak3 sei3 sap6 ng5 haa6 , gau2 sap6 cat1	(237) around 145 and 97,
Final Diagnosis (FD)	501	D	(238) zau6 wan2 ding6 ,	(238) then you're stable.
Treatment Negotiation (TN)	501	D	(239) gam2 ngo5 gin3 dou2 nei5 dou1 okay ge3 ,	(239) I see that you're doing okay
Treatment Negotiation (TN)	501	D	(240) hang4 dou2 loeng5 bou6 gam2 joeng2 ,	(240) and can walk a few steps,
Treatment Negotiation (TN)	501	D	(241) ngo5 zau6 m4 hai6 taai3 daam1 sam1 ,	(241) I'm not that worried.
Treatment Negotiation (TN)	501	D	(242) gam2 bat1 jyu4 ngo5 hoi1 ling6 ngoi6 jat1 di1 zi2 wan4 joek6 bei2 nei5 faan1 uk1 kei5 si3 jat1 si3 , hou2 mou5 aa3?	(242) How about I prescribe some other meds to relieve dizziness for you to try out at home, okay?
Treatment Negotiation (TN)	502	P	(243) daan6 hai6 tau4 sin1 , e6... fan3 hai2 zoeng1 cong4	(243) But just now, ah... when I lied on the bed
Treatment Negotiation (TN)	502	P	(244) jau6 mong6 dou2 go3 tin1 faa1 baan2	(244) and looked at the ceiling
Treatment Negotiation (TN)	502	P	(245) wan4 wan4 dei6 lo1 .	(245) I felt a bit dizzy.
Treatment Negotiation (TN)	503	D	(246) hai6 lo1 ,	(246) Right,
Treatment Negotiation (TN)	503	D	(247) so2 ji5 jiu3 sik6 joek6 lo1 ,	(247) that's why you need to take meds.
Treatment Negotiation (TN)	503	D	(248) nei5== soeng2 m4 soeng2 sik6 zo2 lap1 joek6 sin1 faan2 uk1 kei5 aa1 , ding6 hai6 lyut3 joek6 jat1 zan6 gaan1 sik6 aa3? zi6 gei1 ,	(248) You==Do you--do you want to take the pill before heading home, or you want to get the meds then take them later, yourself??
Treatment Negotiation (TN)	504	P	(249) ==o6 ,	(249) ==Uh.
Treatment Negotiation (TN)	505	P	(250) ji4 gaa1 sik6 lo1 ,	(250) Take it now.
Prospective Treatment (PT)	506	D	(251) ==daan6 hai6 nei5 sik6 zo2	(251) ==but after taking it
Prospective Treatment (PT)	506	D	(252) gei3 zyu6 jiu3 gaak3 faan1 sei3 ng5 go3 zung1 zi1 hau6 sin1 sik6 faan1—	(252) remember to take the second one after four or five hours

Prospective Treatment (PT)	506	D	(253) zik1 hai6 lyut3 zo2 dai6 ji6 —zik1 hai6 nei5 jat1 zan6 gaan1 heoi3 joek6 fong4 lyut3 joek6,	(253) that means take the second—that means you go to the pharmacy to collect the medications,
Prospective Treatment (PT)	506	D	(254) gam2 gaak3 faan1 ng5 go3 zung1 tau4	(254) then wait after around five hours
Prospective Treatment (PT)	506	D	(255) nei5 sin1 zoi3 sik6 kei4 taal joek6, hou2 mou5?	(255) before taking other meds, okay?
Prospective Treatment (PT)	507	P	(256) ==hai6 aa3 hai6 aa3 °	(256) ==Right–right.
Dismissal (DM)	509	D	(257) gam2 jat1 zan6 gaan1 gu1 noeng4 aai3 nei5 meng2,	(257) when the nurse calls you later,
Dismissal (DM)	509	D	(258) gam2 mai1 faan2 uk1 kei5 lo1 , hou2 mou5?	(258) you can go home, alright?
Admission Negotiation (AN)	510	P	(259) m4 sai2 lau4 ji1 aa4?	(259) I don’t have to stay in hospital?
Admission Negotiation (AN)	511	D	(260) gam2 jau6 m4 sai2,	(260) Now that isn’t necessary.
Admission Negotiation (AN)	511	D	(261) nei5 jau6 m4 hai6 waa6 di1 jim4 zung6,	(261) You’re not that serious,
Admission Negotiation (AN)	511	D	(262) nei5 siu2 siu2 ji5 seoi2 bat1 ping4 hang4 ze1,	(262) you just have a bit of imbalanced ear fluids.
Admission Negotiation (AN)	512	P	(263) o2 °	(263) Uh.
Admission Negotiation (AN)	513	D	(264) hai6 laa3 ,	(264) Right,
Admission Negotiation (AN)	513	D	(265) nei5 sam1 din6 tou4 jau6 zing3 soeng4,	(265) your electrocardiogram is normal,
Admission Negotiation (AN)	513	D	(266) jau6 — di1 hyut3 jau6 mou5 je5,	(266) and there’s nothing wrong with your blood.
Discharge (DC)	513	D	(267) gam2 dong1 jin4 laa1 , nei5 jyu6 ni1 jat1 loeng5 jat6 dou1 wui2 zung6 jau5 di1 wan4 ge2,	(267) Of course, you can expect to be still a bit dizzy these two days,
Discharge (DC)	513	D	(268) gam2 jyu4 gwo2 nei5 waa6,	(268) though if you, ah...
Discharge (DC)	513	D	(269) e6... ngo5 gin3 ji5 nei5 zau6 m4 hou2 waa6 zau2 dak1 taai3 jyun5 laa3,	(269) I suggest you not to walk too far,
Discharge (DC)	513	D	(270) hang4 dak1 — hang4 gaai1 hang4 dak1 taai3 jyun5,	(270) walking—not walking too far.
Discharge (DC)	513	D	(271) hai2 uk1 kei5 jau1 sik1 haa2,	(271) Stay home and rest up,
Discharge (DC)	513	D	(272) gam2 ei6 sik6 haa2 joek,	(272) ah, take the meds,
Discharge (DC)	513	D	(273) gam2 do1 sou3 saam1 loeng5 jat6 maan6 maan2 wui2 hou2 di1 gaat3 laa3,	(273) mostly things will gradually get better in a few days.
Discharge (DC)	514	P	(274) o6 °	(274) Uh.
Discharge (DC)	515	D	(275) gam2 dong1 jin2 , jyu4 gwo2 nei5 gok3 dak1 e6... ngo5 wan4 dak1 hou2 sai1 lei6 wo3,	(275) Now of course, if you feel ah... “I’m really dizzy,
Discharge (DC)	515	D	(276) ceot1 m4 dou3 gaai1 aa3,	(276) I can’t leave home”,
Discharge (DC)	515	D	(277) zik6 cing4 zik1 hai6 hai2 zoeng1 cong4 juk1	(277) or you’re literally, ah, stuck in bed, can’t move and such,

			m4 dou2 aa3 go2 di1 ne1 , g	
Discharge (DC)	515	D	(278) am2 nei5 mou5 baan6 faat3 laa3	(278) then there's no way,
Discharge (DC)	515	D	(279) zau6 jiu3 ce1 gwo3 lai4 lo1 , hou2 mou5?	(279) we've got to drive you here, alright?
Discharge (DC)	515	D	(280) == dou3 si4 ho2 nang4 zan1 hai6 jiu3 lau4 jyun2	(280) ==Then you may really have to be admitted,
Admission Negotiation (AN)	515	D	(281) daan6 hai6 nei5 ji4 gaa1 zong6 taai3 gei2	(281) but now your condition is quite fine,
Admission Negotiation (AN)	515	D	(282) ngo5 m4 si2 nei5 lau4 dai1 laa1 , hou2 mou5 aa3?	(282) I don't need you to stay in, okay?
Admission Negotiation (AN)	512	P	(283) ====ng6 ng6 , aa3 aa3 。	(283) ==Mm, ahh.
Admission Negotiation (AN)	513	D	(284) hou2!	(284) Good!
Discharge (DC)	513	D	(285) gam2 jat1 zan6 gaan1 bei2 maai4 lap1 joek6 nei5 sik6 sin1 。	(285) I'll get you a pill in a moment.
Discharge (DC)	514	P	(286) e6... ngo5 soeng2 man6 haa2 go2 di1 joek6 jyun4 m4 sai2 jat1 ding6 hai2 ni1 go3 joek6 fong4 aa1 maa3?	(286) Ah... I'd like to ask, that kind of pills, do I have to get them at the pharmacy here?
Discharge (DC)	514	P	(287) zik1 hai6 ceot1 min6 go2 di1?	(287) I mean, how about those out there?
Discharge (DC)	515	D	(288) hai2 ni1 go3 joek6 fong4 lyut3 ,	(288) Collect the meds at the pharmacy here,
Discharge (DC)	515	D	(289) haa6 。	(289) right.
Discharge (DC)	516	P	(290) o6 ,	(290) Uh
Discharge (DC)	516	P	(291) == ni1 go3 joek6 fong4 lyut3 。	(291) ==get them at the pharmacy here.
Discharge (DC)	517	D	(292) ==m6 ,	(292) ==Mm
Discharge (DC)	517	D	(293) hai6 laa3 — hai6 laa3 。	(293) ==Mm, right—right.
Discharge (DC)	517	D	(294) nei5 jat1 zan6 gaan1 man6 jat1 man6 gul noeng4 ,	(294) You ask the nurse later,
Discharge (DC)	517	D	(295) ni1 go3 ngo5 dou1 m4 hai6 hou2 cing1 co2 ,	(295) I'm not quite sure about this,
Discharge (DC)	517	D	(296) hou2 mou5?	(296) alright?
Discharge (DC)	517	D	(297) o6 ,	(297) Oh,
Discharge (DC)	517	D	(298) gam2 sai2 m4 sai2 gaa3 jau1 sik1?	(298) Do you need to take a sick leave?
Discharge (DC)	518	P	(299) m4 sai2 — m4 sai2 。	(299) No—no.
Discharge (DC)	519	D	(300) m4 sai2 ,	(300) No,
Discharge (DC)	519	D	(301) gam2 nei5 dang2 jat1 zan6 , hou2 mou5?	(301) then you wait for a while, okay?
Discharge (DC)	520	P	(302) o6 ,	(302) Uh,
Discharge (DC)	520	P	(303) hou2 — hou2 ,	(303) okay—okay.
Discharge (DC)	521	D	(304) bei2 lap1 joek6 nei5 sik6 aa3 。	(304) I'll get you a pill.
Turn 522 to Turn 537 omitted				

Patient Identification (PI)	538	D	(305) Crystal	(305) Crystal
Patient Identification (PI)	539	P	(306) haa3	(306) Huh.
Discharge (DC)	540	D	(307) ngo5 tau4 sin1 ne1 tung4 gu1 noeng4 deoi3 gwo3 aa3,	(307) I just checked with the nurse,
Discharge (DC)	540	D	(308) jan1 wai6 nei5 go2 zek3 zi2 wan4 joek6 ne1 zau6 man5 gam2,	(308) because you're allergic to that anti-fainting pill,
Discharge (DC)	540	D	(309) zik1 hai6 go2 zek3 ne1, gang2 sai3 go2 di1 ne1 zau6 m4 sik6 dak1.	(309) I mean that pill, what was selected you can't take them.
Discharge (DC)	541	P	(310) hai6 aa3 hai6 aa3 °	(310) Right-right.
Discharge (DC)	542	D	(311) ==hai6 lo1 ,	(311) ==Right.
Discharge (DC)	542	D	(312) gam2 ngo5 dei6 gap1 zing3 sat1 jau5 ge3 zi2 wan4 joek6 zau6 hai6 wui2 sik6 zo2 ling6 nei5 gang2 go2 di1 lei4 ge3.	(312) Now what we have at the A&E is the type that makes you panic.
Discharge (DC)	542	D	(313) gam2 so2 ji5 ne1, e6... jyu4 gwo2 nei5 waa6 ji4 gaa1 soeng2 sik6 joek6	(313) So, ah if you want to take the pills now;
Discharge (DC)	542	D	(314) zau6 mei6 bit1 lyut3 dou2,	(314) ... you may not get them
Discharge (DC)	542	D	(315) gam2 jiu3 nei5 zi6 gei2 heoi3 joek6 fong4	(315) then you have to head to the pharmacy
Discharge (DC)	542	D	(316) lyut3 ling6 ngoi6 jat1 zek3 dak6 bit6 di1 ge3 joek6	(316) and get another specific medicine
Discharge (DC)	542	D	(317) oi3 lai4 zi2 wan4.	(317) to relieve the dizziness.
Discharge (DC)	542	D	(318) gam2 nei5 zan6 gaan1 heoi3 joek6 fong4 lyut3 zo2 joek6 nei5 e6...	(318) Now later you go to the pharmacy to get the meds, ah...
Discharge (DC)	542	D	(319) hai2 joek6 fong4 sik6 zo2	(319) Take the meds at the pharmacy,
Discharge (DC)	542	D	(320) mei6 zau2 lo1, hou2 mou5?	(320) and you can leave, alright?
Discharge (DC)	543	P	(321) m6 °	(321) Mm.
Discharge (DC)	544	D	(322) hai6 lo1 ,	(322) Right,
Discharge (DC)	544	D	(323) jan1 wai6 jyu4 gwo2 ngo5 ji4 gaa1 bei2 nei5 sik6,	(323) because if I let you take it now,
Discharge (DC)	544	D	(324) geng1 nei5 gang2 sai3 aa3,	(324) I'm worried that you'll panic.
Discharge (DC)	544	D	(325) jan1 wai6 ngo5 dei6 mou5 go2 zek3 joek6 aa3,	(325) Because we don't have that medicine,
Discharge (DC)	544	D	(326) hou2 mou5?	(326) alright?
Discharge (DC)	544	D	(327) gam2 ngo5 hoil zo2 ling6 ngoi6 jat1 zek3 bei2 nei5 ge3, hou2 mou5?	(327) So I prescribed another one for you, is that alright?
Discharge (DC)	545	P	(328) m6 °	(328) Mm.
Discharge (DC)	546	D	(329) hou2!	(329) Good!

Discharge (DC)	546	D	(320) gam2 aa3 nei5 jau1 sik1 haa2 ,	(320) Now you take some rest,
Discharge (DC)	547	D	(321) gam2 jat1 zan6 gaan1 aai3 nei5 。	(321) we'll call you later.
Discharge (DC)	548	P	(322) aa3 ,	(322) Ah,
Discharge (DC)	548	P	(323) hou2 aa3 。	(323) good.
Discharge (DC)	548	P	(324) aa3!!	(324) Hey!
Discharge (DC)	548	P	(325) gu1 noeng4	(325) Nurse!
Prospective Treatment (PT)	548	P	(326) go2 di1 go2 di1 zi2 wan4 joek6 ho2 ji5 hung1 tou5 sik6, dak1 m4 dak1 gaa3?	(326) That type of dizziness relieving pills, can they be taken on an empty stomach?
Prospective Treatment (PT)	549	D	(327) dou1 dak1 。	(327) It works too
Prospective Treatment (PT)	549	D	(328) == bat1 gwo3 nei5 waa6 mou5 sik6 je5 ,	(328) .==But you said you hadn't eaten anything,
Prospective Treatment (PT)	549	D	(329) pei3 jyu4 nei5 jat1 zan6 gaan1 sik6 di1 je5 sin1 zau2 lo1 。	(329) What if you get something to eat before leaving.
Prospective Treatment (PT)	549	D	(330) zi6 gei2 heoi3 fu6 gan6 maa5 di1 je5 sik6 sin1 lo1 。	(330) Go to some eateries nearby to grab a bite.
Prospective Treatment (PT)	550	P	(331) ==aa3 hai6 aa3 jat1 hai6	(331) ==Ah, right, how about
Prospective Treatment (PT)	551	D	(332) nei5 mou5 sik6 je5 ==zau1 wai4 hang4 dou1 wui6 wan4 gaat1 maa3, hai6 mai5?	(332) With an empty stomach==walking around, you will feel dizzy, right?
Prospective Treatment (PT)	552	P	(333) aa3 , hou2 aa3 。	(333) Ah, okay.
Prospective Treatment (PT)	553	D	(334) hai6 lo1 。	(334) Right.

To further pinpoint how cross-stratal calibration of meanings are manifested within generic elements and in turn semantic acts, let me illustrate it with an in-depth qualitative account of two specific phase, *viz.*, Phase 2 *Uncovering patient conditions* and Phase 5 *Delivering clinical judgment*. These two crucial phases are chosen as they are where the [short-term] goals are situated – the former one is the crux of IMC whereas the latter one is the locus of FMC, and more precisely, the [long-term] goal of the entire patient journey. Acknowledging that the linguistic description below might appear to be a running commentary, I believe a close scrutiny of linguistic features, together with my observation notes in patient shadowing, would serve as a good demonstration in highlighting the intrinsic relations within context, semantics and lexicogrammar. More specifically, it addresses the following issues¹⁰⁵:

1. how Crystal – emergency doctor dyad actively maintains the social relation by keeping their complex and shifting tenor roles – both social role (i.e. INSTITUTIONAL ROLE /AGENTIVE ROLE) and discoursal one – in play throughout the patient journey (cf. Slade *et al.*, 2008);
2. how the varied roles of Crystal and her emergency doctor could facilitate the construal and/or enactment of semantic acts in each propositional/proposal exchange;
3. how the activated semantic attributes in these acts respond to the contextual pressure and at the same time construe the realising lexicogrammatical choices so that the *meanings* of every semantic act within generic elements is a multi-stratal construct.

¹⁰⁵ It should be emphasised that the ‘instance-based view’ of Crystal’s patient experience, by no means, exclude the ‘individual speaker’s ways of speaking’ (Hasan, 2014, p. 4)

7.5.1.1 Phase 2 Uncovering patient conditions

Contextually, a move from *Phase 1 Opening* to *Phase2 Uncovering patient's conditions* yielded a major contextual reclassification. In terms of FIELD OF DISCOURSE, the SOCIAL ACTIVITY became diversified, resulting in three generic elements viz., Problem Presentation (PP), History Taking (HT) and Physical Examination (PE). In terms of TENOR OF DISCOURSE, the Crystal – dyad remained, but the [hierarchic] SOCIAL STATUS escalated as the interaction unfolds (i.e. doctor: superordinate vs. Crystal: subordinate). In terms of MODE OF DISCOURSE, the LANGUAGE ROLE, depending on nature of the social activity of the generic elements, diversified into [ancillary] and [constitutive].

7.5.1.1.1 Problem Presentation (PP)

Text 7.1 Problem Presentation (PP) (Msg 16 - 21)

Activity Stage 1: Initial Medical Consultation

Participant

D: Doctor

P: Crystal

G	T	S	Act	Cantonese Messages	English Translation
PP	163	D		(16) gin3 me1 si6 aa3?	(16) What's the matter?
PP	164	P		(17) e6... ngo5 gam1 ciu4 cat1 dim2 zung1 hei2 san1 ne1	(17) Ah... when I got up at seven o'clock this morning,
PP	164	P		(18) zau6 tau4 wan4 laa3,	(18) I was dizzy
PP	164	P		(19) go3 jan4 ne1 dam4 dam4 zyun2 gam2 joeng2	(19) like I was spinning and such.
PP	165	D		(20) m6,	(20) Mm,
PP	165	D		(21) hou2 aa3	(21) okay.

KEY: = the semantic act of opening space

As the interaction proceeds, Crystal and the emergency doctor turn to the next generic element Problem Presentation (PP). The recognition of PP here can be traced back to those CA studies of primary care (cf. 'presenting concerns' in Robinson, 1999; see also Robinson and Heritage, 2005;

Heritage and Robinson, 2006 and many others). In this study, PP is defined as the pre-element of History Taking (HT). It is a ‘medically institutionalised project of phased activity’ in which patients are offered ‘institutionalised license’ to present what they perceive as ‘problems’ (Robinson and Heritage, 2005, p. 482; see also Heritage and Robinson, 2006).

As shown in Text 7.1, PP was interpersonally enacted as a propositional exchange, with a QUESTION ^ ANSWER speech functional sequence. That is, the emergency doctor took on the discoursal role of ‘questioner’ and initiated a **semantic act of opening space**. Viewed ‘from above’, the enactment of such an act varied with the activated selection in TENOR OF DISCOURSE. Co-textually, the solicitation in Crystal’s PP was **[neutral]** and **[non-restrictive]** – it is in itself ‘unmarked’ in TENOR OF DISCOURSE so that this general, non-restrictive inquiry claimed a lack of knowledge in Crystal’s chief complaint as in *gin3 me1 si6 aa3* (‘*What’s the matter?*’) (i.e. message 16). Contrary to **[natural]**, in a message semantic sense, is its systemic contrast **[social]** which semantics the [hierarchic] SOCIAL STATUS. This systemic option entails a further selection between **[service]** and **[order]** – the former semanticises the asymmetrical SOCIAL STATUS between two participants so that A is in the service of B (A: subordinate: B superordinate) whereas the latter is A directs B (i.e. A: superordinate: B: subordinate). Had the question selected **[social: service]** as in *ngo5 jau5 me1 ho2 ji5 bong1 dou3 nei5* (‘*What can I do for you?*’), the question would have been tenor-marked (SOCIAL RELATION: doctor (*service-provider*) – Crystal (*client*); SOCIAL STATUS: [hierarchic] i.e. doctor: subordinate; Crystal: superordinate), implying a sense of ‘service relationship’ in doctor-Crystal dyad (see Heritage and Robinson, 2006, p. 92).

In a lexicogrammatical sense, the point of enquiry of Crystal’s tenor-neutral opening question

felt under the experiential domain ‘medical problem’ (i.e. a preselection of Wh-element *me1 si6* (literally as ‘what + matter’) as Complement, which conflated with Possession in TRANSITIVITY)). An open-ended question of this kind thus not only gives spaces to Crystal to give her ‘de-novo presentation’, but also enables the emergency doctor to ‘frame and shape’ the opening space of problem presentation (Robinson and Heritage, 2006, p. 279; see also Robinson and Heritage, 2005, and many others). Had the opening question been structured as *nei2 gin3 dim2 aa3* (‘How are you?’), the enquiry point would have been shifted from **[problem]** to **[evaluation]** (i.e. a preselection of Wh-element *dim* (‘how’) as Complement, conflating with Attribute in TRANSITIVITY). The realisational relationship between context, semantics, and lexicogrammar in Problem Presentation (PP) is diagrammatically illustrated in Figure 7.2.

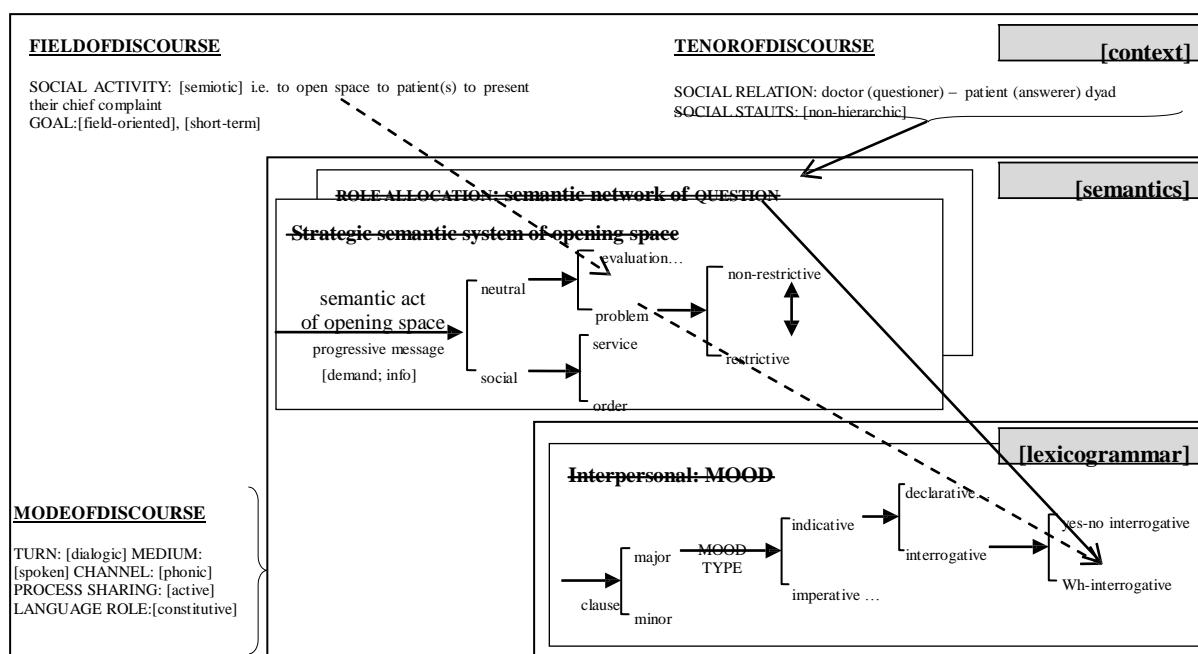


Figure 7.2 The intrinsic relations within context, semantics and lexicogrammar in Crystal's Problem Presentation (PP)

Co-textually speaking, Crystal took on the complementary discursual role of ‘answer: narrator’,

providing the information on demand. In Crystal's case, the presenting concern was highly semanticised, displaying what Hasan (2011 [1984]) termed as 'frame' her nursery tale analysis (cf. chronicling event in Matthiessen *et al.*, 2010). Semantically, message 17 *ngo5 gam1 ciu4...* ('*When I ...*') selected the feature [**non-supplemented; supplementing: enhancement**], acting as the background of the once-occurring main act (i.e. message 18 and 19) (Hasan, 2011 [1984], p. 312). More specifically, the event was construed as non-habitual, realis and of distal spatial proximity. For example, the realising clause of message 17 selected nominal group *gam1 ciu4* ('*this morning*') and *cat1 dim2 zung1* ('*seven o'clock*') as Temporal Adjunct/Circumstance). The selection thus indicates that the events of the propositional content are actualised actions, which are remote from the moment of speaking. A semantic construal of this kind is thus in line with Heritage and Robinson's (2006, p. 49) observation of PP in primary care that the descriptions of PP entails 'elements of cogency or disorganization, affective expression, and recognizable structure and content'.

7.5.1.1.2 History taking (HT)

Text 7.2 History taking (HT) (Msg 22 – 93; 103 – 116; 137- 151)

Activity Stage 1: Initial Medical Consultation

Participant

D: Doctor

P: Crystal

G	T	S	Act	Cantonese Messages	English Translation
HT	165	D		(22) cat1 dim2 zung1 hei2, hai6 mai1 aa3?	(22) At seven o'clock you==woke up, right?
HT	166	P	*	(23) ==hei2 – hei2 cong4.	(23) ==Out–out of bed.
HT	167	D		(24) == jau5 mou5 bat1 sing2 jan4 si6 go2 di1 aa3 ?	(24) ==Did you pass out and such?
HT	168	P	*	(25) zik1 hai6 dou1 cing1 sing2	(25) I mean, still awake,
HT	168	P	*	(26) daan6 hai6 hang4 hei2 soeng6	(26) but when I walked,

				lai4 ne1	
HT	168	P	*	(27) zau6 zong1 haa2 zong1 haa2.	(27) I dipped and dipped.
HT	169	D		(28) jau5 mou5 au2 dou3 gam2 joeng2 aa1?	(28) Did you vomit or something ?
HT	170	P	*	(29) e6 , mei6 jau5 au2.	(29) Ah, not yet.
HT	171	D		(30) dou1 hai6 hang4 dak1 dou2 ge3	(30) You were still ambulatory.
HT	171	D		(31) jau5 mou5 dit1 gwo3 aa3 gam2 joeng2?	(31) Did you fall or something?
HT	172	P	*	(32) dou1 jiu3 fu4 zyu6 aa3.	(32) I needed support.
HT	173	D	*	(33) o6.	(33) Uh.

KEY: = the semantic act of history-taking
 * = the semantic act of recounting history

Having legitimised patient's medical concern, the medical consultation moves to History Taking (HT). As exemplified in Text 7.2, HT was interpersonally enacted as a series of propositional exchanges, sequentially ordered in a QUESTION ^ ANSWER structure. Whereas emergency doctors continued the role of 'questioner', the discursual role of Crystal shifted from 'narrator' to 'reporter'. One major implication in this role reallocation led to a shift in SOCIAL STATUS – the near [non-hierarchic] relation in PP became more [hierarchic] in HT, exhibiting a high power distance between Crystal and doctor (i.e. doctor: superordinate *vs.* Crystal: subordinate). As a result, Crystal's space in presenting her concern was constrained; the propositional content was significantly reduced from a coherent narrative to answers scattered across doctor's interrogation.

7.5.1.1.2.1 The semantic act of history-taking

Viewed in the EXCHANGE STRUCTURE sense, the emergency doctor positioned herself as 'secondary knower'¹⁰⁶ (i.e. Berry, 1987). Such a self-positioning in the exchange structure thus claimed a lack of knowledge in doctor's interactions; what she had to do is to demand information through the **semantic act of history-taking**. In a message semantic sense, the history-taking act entered the network of RELATION ENACTMENT:

¹⁰⁶ Following Berry (2016, p. 196), 'secondary knower' is written in lower case, suggesting that it is patients, rather than doctors, who know most about the specific details of symptoms in discussing patient's symptoms.

QUESTION presented in Chapter 6. Interpersonally, the semantics of questioning varied in terms of its co-text of doctor-patient communication, prompting an enquiry into either (i) the polarity or (ii) the experiential domains of a proposition such as *when, what, how*. For instance, the demand of information in message 24 in exchange 9 selected the semantic attributes **[initiate]** in CONTINUATION and **[confirm: ask]** in RELATION ENACTMENT respectively, as in == *jau5 mou5 bat1 sing2 jan4 si6 go2 di1 aa3?* (‘==Did you pass out and such?’). Semantically, it was the first initiating question which provoked an enquiry into the polarity of the event i.e. whether Crystal has passed out in the early morning. This general enquiry was lexicogrammatically realised by a yes-no interrogative in Cantonese MOOD TYPE. Figure 7.3 presents the realisational relationship within the semantic act of history taking in History Taking (HT) phase.

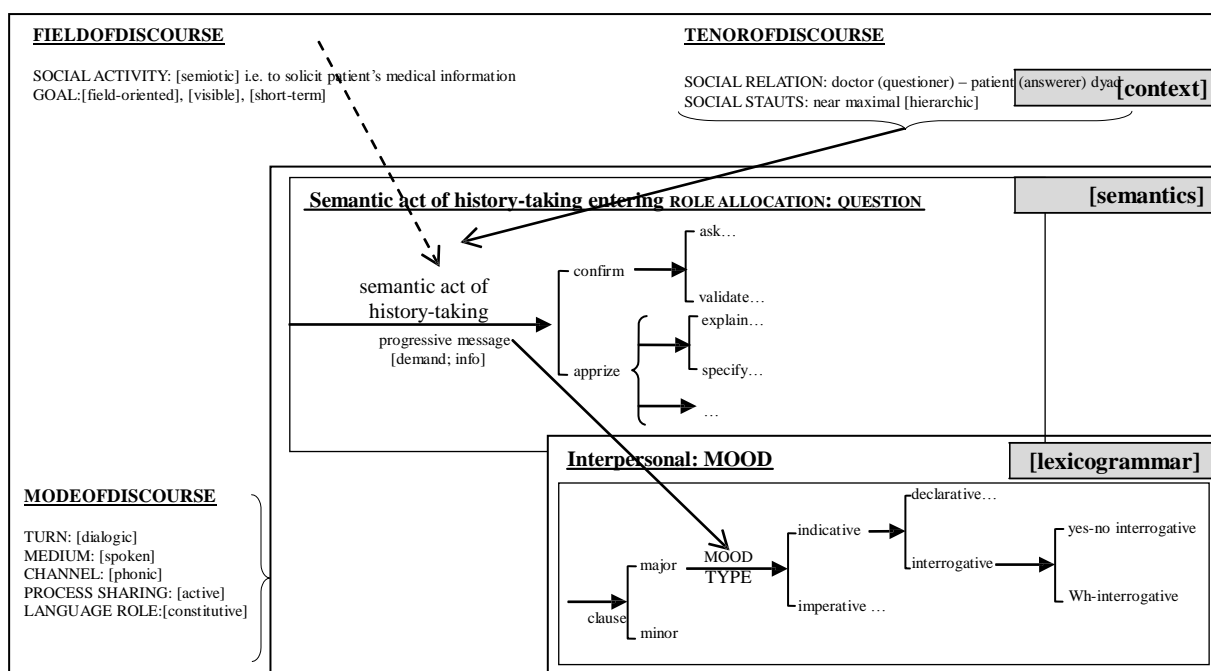


Figure 7.3 The intrinsic relations within context, semantics and lexicogrammar in the semantic act of history-taking in Crystal's History Taking (HT)

7.5.1.1.2.2 *The semantic act of recounting history*

The semantic realisation of history taking extended towards patient's reply through the **act of recounting history**. Ideationally, the semantics of answering entails one (or more) PARTICIPANT(s), whether that is event, feeling, symptom, self-diagnosis to name but a few (Halliday and Matthiessen, 2006). For example, in responding the verifying question (i.e. message 24), the answering act (i.e. message 25 – 27) selected the systemic choices **[event]** and **[symptom]**. With regard to the former, the act concerned the description of medical events, i.e. how Crystal experienced the medical discomfort in the early morning. The description of this medical event was logically expanded through the system network of CONTINUATION. Here the selection of semantic feature **[supplemented; supplementing; enhancement]** in message 26 '*hang4 hei2 soeng6 lai4 ne1*' ('when I walked') served as a temporal enhancement of message 27. Experientially, the event sequence in message 25 – 27 was construed as non-habitual, realis and of distal spatial proximity, indicating that the events are actualised actions which are prior to the moment of speaking. With regard to the latter, the symptom depicted by Crystal in message 27 was construed as an 'external' biomedical process (i.e. **[biomedical; process]**), and was expressed linguistically through non-specialised language (i.e. **[quotidian]**). In a TRANSITIVITY sense, this symptom-as-process construal was realised by a behavioral clause, with a preselection of 1-SG pronoun *ngo5* ('I') as elliptical Behavior and *zong1 haa2 zong1 haa2* ('*dipped and dipped*') as Process (cf. Halliday, 1998). The meanings at risk in the act of history-taking and the act of recounting history thus constitutes the crucial semantic realisations of the generic element of History taking. Figure 7.4 presents the cross-stratal calibration of the semantic act of recounting history in History Taking

(HT) phase.

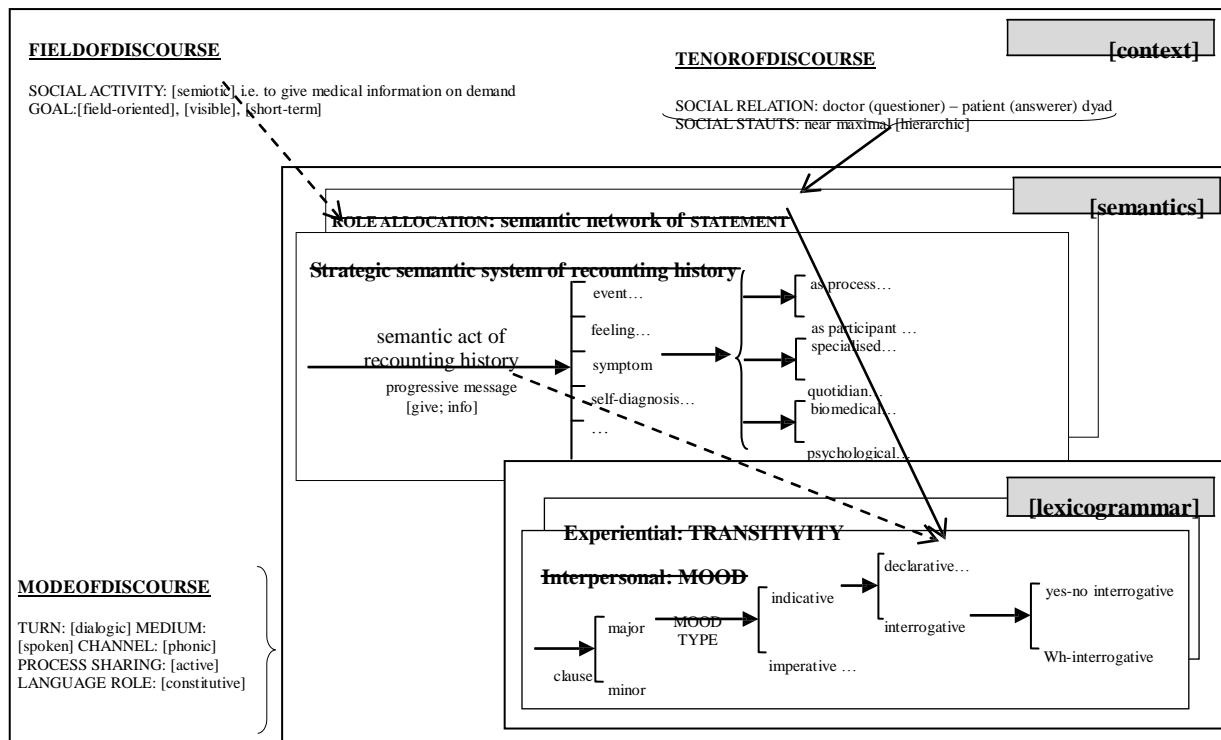


Figure 7.4 The intrinsic relations within context, semantics and lexicogrammar in the semantic act of recounting history in Crystal's History Taking (HT)

In a sequential sense, the typical ordering of semantic acts of each propositional exchange display what Martin would term it as a $K2^A K1^A K2f$ exchange structure¹⁰⁷ – a three-part structure in which K2 stands for the initiating act of history taking; K1 the responding act of recounting history, and K2f a follow-up. The habitual use of $K2^A K1^A K2f$ exchange structure in Crystal's HT phase indicates an **asymmetry of power** between Crystal and her emergency doctor so that the social process of history taking resembles 'interrogation' rather than casual conversation (cf.

¹⁰⁷ Lack of space precludes a detailed discussion here. Briefly, Martin's EXCHANGE SEQUENCE is re-adapted in message analysis for the sake of illustration. In a SFL sense, exchange structure analysis concerns 'patterned sequences of conversational structure' in terms of moves (Thompson and Muntigl, 2008, p.133). According to Martin and his colleagues, ES is conceptualised as a structural potential viz., $(X2)^A \wedge X1^A \wedge (X2f \wedge (X1f))$, where X stands for either A (i.e. an exchange of actions/proposals) or K (i.e. an exchange of knowledge/propositions). The $K2^A K1^A K2f$ exchange sequence is thus read as 'a doctor's initiation (i.e. question) is followed by a patient's response (i.e. answer), which is followed by the doctor's follow-ups'.

Eggins and Slade, 2004). This ‘interrogation-like’ discourse structure in HT, in a registerial sense, shades into those interview registers in institutional contexts (e.g. news interviews: Greatbatch, 1988, Heritage & Greatbatch, 1991; job interviews: Roberts & Campbell 2005; and police interrogations: Haworth, 2006, Benneworth, 2009, Yoong, 2010 and Momeni, 2011).

7.5.1.1.3 Physical Examination (PE)

Text 7.3 Physical Examination (PE) (Msg 94 – 102; 117 – 136; 152 – 159)

Activity Stage 1: Initial Medical Consultation

Participant

D: Doctor

P: Crystal

G	T	S	Act	Cantonese Messages	English Translation
PE	2z3 2	D	*	(117) sau2 zi2 jat1 zek3 nei5 mong6 m4 mong6 dou2?	(117) Can you see my finger ?
PE	233	P		(118) mong6 dou2.	(118) I can.
PE	234	D		(119) mong6 zyu6 aa1,	(119) Look,
PE	234	D	*	(120) jau5 mou5 bin3 zo2 gei2 zek3 aa3 ?	(120) would you see a few more?
PE	235	P		(121) ji4 gaa1 jau6 mou5.	(121) Not now.
PE	236	D	*	(122) jat1 zek3?	(122) Just one?
PE	237	P		(123) haa6.	(123) Yes
PE	238	D		(124) sau2 zi2 dim1 gwo3 lei4.	(124) Touch your finger to.
PE	238	D	*	(125) dim3 m4 dim3 dou2 bei6 go1?	(125) Can you touch your nose?
PE	238	D		(126) cung5 fuk1 zou6 aa1.	(126) Do it again.
PE	238	D		(127) hai6 laa3 ,	(127) Right.
PE	238	D		(128) ni1 go3 si3 haa2.	(128) Try this.
PE	238	D		(129) dim1 gwo3 lai4,	(129) Move it,
PE	238	D		(130) dim3 bei6 go1.	(130) Touch the nose.
PE	238	D	*	(131) tai2 je5 jau5 mou5 waa6 mung4 sai3	(131) Did things blur?
PE	238	D	*	(132) (tai2 je5 jau5 mou5 waa6) tai2 m4 dou3 gam2 joeng2 aa3	(132) Can you see?
PE	239	P		(133) gam1 ciu4 wan4 go2 zan2 si4	(133) When I felt dizzy this morning,
PE	239	P		(134) zau6 wui2 laa3.	(134) it was.
PE	240	D		(135) ji4 gaa1 jau5 mou5?	(135) Is it happening now?
PE	241	P		(136) ji4 gaa1 hou2 — hou2 hou2==do1.	(136) Now it's better—much, much==better.

KEY: = the semantic act of physical examination

* = the semantic act of soliciting patient's reaction

The continuous unfolding of Crystal's medical consultation brings us to Physical Examination (PE), a field-oriented element aiming to uncover patients' medical symptoms and illnesses. Contextually, a shift from HT to PE yielded a significant contextual reclassification. In terms of FIELD OF DISCOURSE, the SOCIAL ACTIVITY became socio-semiotic, concerning the examination of patients' physical ability (i.e. the ability to perform some physical acts such as bending, twisting, stretching etc.). In terms of TENOR, whereas the SOCIAL ROLE (i.e. Crystal – doctor dyad) remained the same, the [hierarchic] SOCIAL STATUS reached the maximum (i.e. doctor: superordinate vs. Crystal: subordinate). In terms of MODE, the LANGUAGE ROLE in PE was [ancillary] – the use of language simply assists the performances of the social activity.

Responding to the contextual reclassification, PE was interpersonally enacted as both proposal exchanges and propositional exchange – the former concerns the enactment **the semantic act of physical examination** whereas the latter **the semantic act of soliciting patient's reaction**.

7.5.1.1.3.1 The semantic act of enacting physical examination

With regard to the former, each proposal exchanges constitutes a speech functional sequence of COMMAND ^ COMPILE. As illustrated in Text 7.3, in directing Crystal to touch her nose with her fingers (i.e. message 124 – 130), the emergency doctor took on the discursual role of 'commander', initiating a **semantic act of physical examination** through [**demanding; goods-&-services**]. This, in turn, positioned Crystal as 'undertaker' who *typically* enacted **compliance** through material/social action, rather than a verbal one (i.e. either UNDERTAKING or REFUSAL, see Halliday and Matthiessen, 2014,

p. 137 for a detailed discussion). In a broad semantic sense¹⁰⁸, the semantic act of physical examination was realised ideationally as (a) ‘figure-of-doing’ in semantics and (b) TRANSITIVITY in lexicogrammar.

In an ideational semantic sense, the commands selected ‘the figure of ‘doing’’ so that each realising clause, in its simplest form, was configured as (Actor) + Process + Goal (Halliday and Matthiessen, 2006, p. 53), with a selection of material process as process type. In a lexicogrammatical sense, it indicated that the experiential realm of imperative was action-oriented, resulting in a formulation of ‘A orders/directs B to act on C’. For instance, in Crystal’s encounter, the demands for goods-&-services in messages 124, 126, 128, 129 and 130 were all lexicogrammatically realised as [*imperative: jussive: implicit*] clause, and each Predicator in these realising clauses conflated with material process in TRANSITIVITY, as in *dim1* ‘touch’ (i.e. message 124), *zou6* ‘do’ (i.e. message 126) and *si3* ‘try’ (i.e. message 128).

The selection of material process in imperative clause to express command (i.e. # ^ P/Material) in Crystal’s PE was contextually-driven, exhibiting the ‘activation-construal dialectic’ relation between context, semantics and lexicogrammar (Hasan, 2009f, p. 170). Regarding FIELD OF DISCOURSE and MODE OF DISCOURSE, the [**action-based**] SOCIAL ACTIVITY and the [**ancillary**] LANGUAGE ROLE *co-activated* the semantic choice of [**doing**] (cf. ‘figure-of-doing’ in ideational semantics, see Halliday and Matthiessen, 2006), which in turn *activated* the lexicogrammatical choice of Material process in

¹⁰⁸ Theoretically, the act of physical examination enters Hasan’s message semantic network of ROLE ALLOCATION, or more specifically, her speech function network of COMMAND (see Hasan, 2009c [1992] for a detailed discussion) and CLASSIFICATION. For lack of space, the details of Hasan’s network will receive no formal discussion, though I will try to show at least some connections in a broad semantic sense.

TRANSIVITY. As for TENOR OF DISCOURSE, the **[maximal]** SOCIAL DISTANCE and **[asymmetrical]** SOCIAL STATUS between Crystal – doctor dyad *co-activated* the semantic choice of COMMAND in SPEECH FUNCTION, which subsequently activated the lexicogrammatical choice of [*imperative*] clause. Important in this calibration (i.e. TENOR OF DISCOURSE COMMAND MOOD, with a particular attention on the lexicogrammatical congruency i.e. congruent vs. incongruent realisations) enables us to mark the discursive distinction between patient-centeredness (cf. ‘service relationship’ in Heritage and Robinson, 2006, p. 92) and doctor-centeredness – the former is *typically* realised by incongruent realisation (e.g. a modulate indicative clause with an interactive Subject) as in *nei5 ho2 m4 ho2 ji5...* (*‘I wonder if you...’*) whereas the latter by congruent one (i.e. # ^ P). A diagrammatic representation of the multi-stratal calibration of the semantic act of physical examination is presented in Figure 7.5.

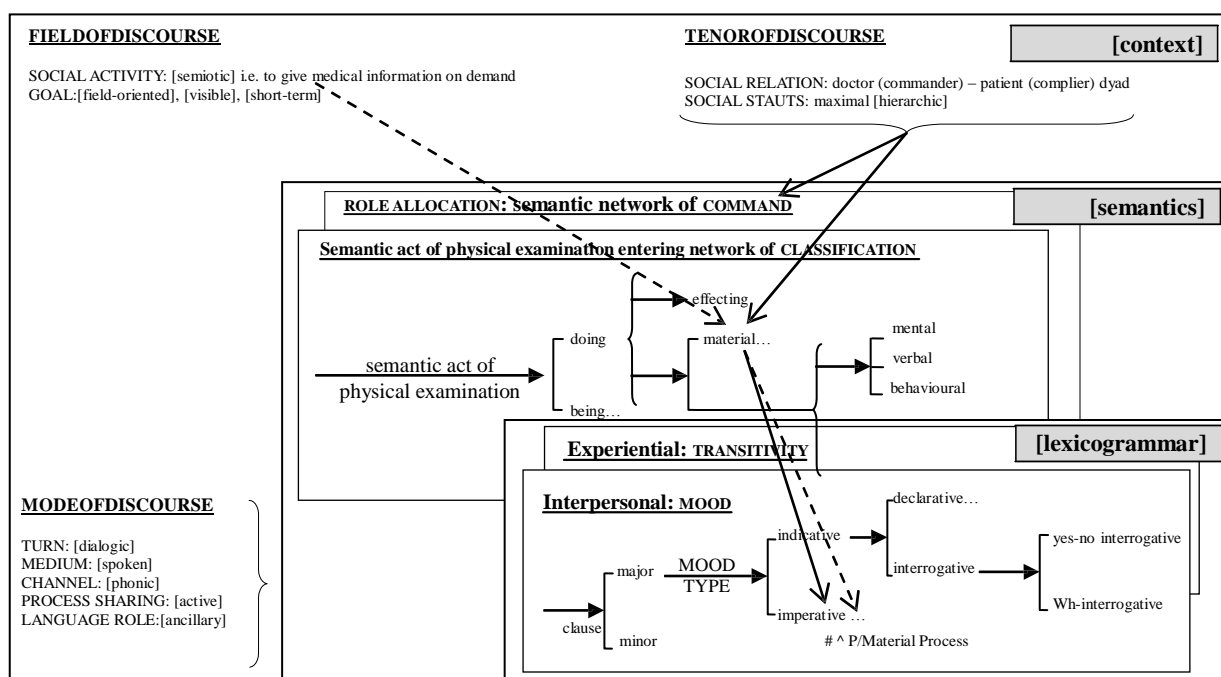


Figure 7.5 The intrinsic relations within context, semantics and lexicogrammar within the semantic act of physical examination in Crystal’s Physical Examination (PE)

7.5.1.1.3.2 The semantic act of soliciting the patient’s reaction

With regard to the latter, each propositional exchanges constitutes a speech functional sequence of QUESTION ^ ANSWER. As illustrated in Example 7.7, having directed Crystal to perform command, the emergency doctor took on the discoursal role of ‘questioner’, initiating a **semantic act of assessing patient’s reaction**.

In a message semantic sense, it entered the semantic network of QUESTION, prompting an enquiry of patient’s reaction, including (i) the polarity or (ii) the experiential domains of a proposition such as *when*, *what*, *how*. In Crystal’s encounter, the enquires were typically realised by **[confirm]** question, concerning Crystal’s visual and physical abilities, whether she could see and touch the doctor’s finger. For instance, message 117, 120, 125,

131 selected the semantic feature **[confirm: ask]**, and were realised lexicogrammatically by yes-no interrogatives (i.e. a preselection of *jau5 mou5* ‘have-NEG-have’ in message 120, 131 and 132 *dim3-m4-dim3* ‘touch- NEG-touch’ in message 125 as A-not-A interrogative marker). Message 122, by contrast, selected **[confirm: validate: check: non-assumptive]**, which was lexicogrammatically realised by a declarative plus rising tone. Figure 7.6 presents the realisational relationship within the semantic act of assessing patient’s reaction in Physical examination (PE) phase.

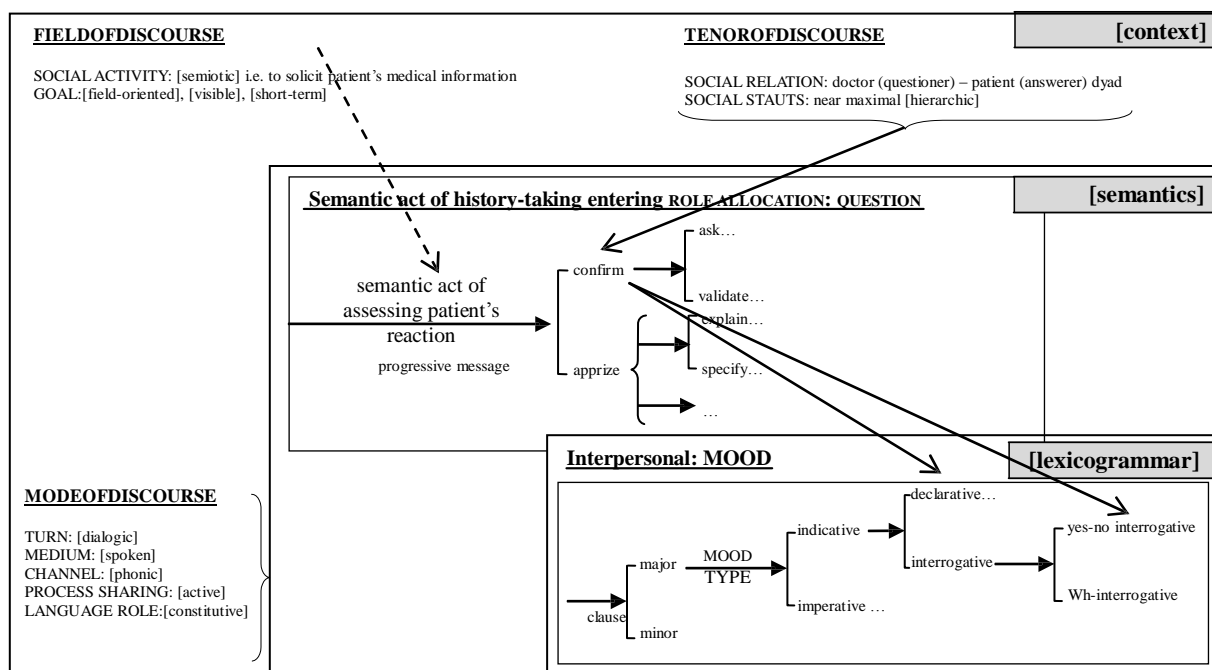


Figure 7.6 The intrinsic relations within context, semantics and lexicogrammar within the semantic act of soliciting patient’s reaction in Crystal’s Physical Examination (PE)

7.5.1.2 Phase 5 Uncovering patient conditions

Having determined the medical condition, Crystal and her emergency doctor started Final Diagnosis (FD). Contextually, FD is *primarily* motivated by both FIELD OF DISCOURSE and TENOR OF DISCOURSE. The Janus-like focus in FD leads us to two semantic acts, namely (i) **the**

semantic act of delivering diagnosis and (ii) the semantic act of enacting stance.

7.5.1.2.1 Final Diagnosis (FD)

Text 7.4 Final Diagnosis (FD) (Msg 224 - 238)

Activity Stage 2: Final Medical Consultation

Participant

D: Doctor

P: Crystal

G	T	S	Act	Cantonese Messages	English Translation
FD	477	D		(224) zou6 zo2 sam1 din6 tou4	(224) You did an electrocardiogram;
FD	477	D		(225) zing3 soeng4,	(225) it's normal.
FD	478	P		(226) o6 °	(226) Uh.
FD	479	D		(227) hyut3 tong4 tung4 hyut3 sik1 sou3 dou1 zing3 soeng4,	(227) Blood sugar and haemoglobin are normal too.
FD	497	D		(228) gam2 ho2 nang4 nei5 lai4 dou3 ne1	(228) Perhaps when you got here just now,
FD	497	D		(229) gan2 zoeng1 di1 waa1 tau4 sin1 °	(229) you were a bit anxious
FD	498	P		(230) ng6 ,	(230) Mm.
FD	499	D		(231) gam2 lai4 dou3 go2 hyut3 aat3 heoi3 dou3 jat1 baak3 gau2 sap6 gei2 jau6	(231) Now the blood pressure has reached around 190,
FD	499	D		(232) bei2 gaau3 gou1 laa1 °	(232) that's relatively high.
FD	500	P		(233) m6 °	(233) Mm.
FD	501	D		(234) gam2 nei5 kei4 sat6 ho2 nang4 wan2 zan6,	(234) Well actually, you may be stable now,
FD	501	D		(235) ze1 hai6 ji4 gaa1 mou5 gam2 wan4 ne1 ,	(235) that means you're not that dizzy now,
FD	501	D		(236) hyut3 aat3 dou1 zing3 soeng4 faan1 ,	(236) your blood pressure gets to the normal range,
FD	501	D		(237) jat1 baak3 sei3 sap6 ng5 haa6, gau2 sap6 cat1	(237) around 145 and 97,
FD	501	D		(238) zau6 wan2 ding6,	(238) then you're stable.

KEY: = the semantic act of delivering diagnosis

* = the semantic act of enacting stance

7.5.1.2.1.1 The semantic act of delivering diagnosis

As the name implies, the **semantic act of delivering diagnosis** concerns the dissemination of finalised clinical medical judgements. Viewed 'from above', the act was activated by the selections in both FIELD OF DISCOURSE (SOCIAL ACTIVITY: the

dissemination of diagnostic plan) and TENOR OF DISCOURSE (SOCIAL RELATION: doctor (*professional*) – Crystal (*layman*); SOCIAL STATUS: [hierarchic]). The activated selections in FD were thus semanticised as **the act of delivering diagnosis**. Semantically, the meanings at risk in this act are particularly relevant to the systems of RELATION ENACTMENT and CONTINUATION – the former enables doctors to deliver diagnosis through SPEECH FUNCTION: STATEMENT whereas the latter allows doctors to construe diagnostic explanations through SUPPLEMENTATION.

Viewed ‘from roundabout’, FD was enacted as a series of propositional exchanges in the sequence of STATEMENT ^ ACKNOWLEDGEMENT. For instance, in Crystal’s encounter, message 234 – 236 constituted a speech functional exchange. Within each speech functional exchange, it displayed a K1^K2^(K1f) exchange structure (e.g. Martin, 1992 and many others) – the emergency doctor positioned herself as ‘primary knower’ (Berry, 1987), or more specifically, the one who was ‘institutionally knowledgeable’ (Thompson and Muntigl, 2008, p. 121) to give information. Here, Crystal’s emergency doctor initiated the semantic act of delivering diagnosis – message 234 and 235 selected the SPEECH FUNCTION: STATEMENT as in *zou6 zo2 sam1 din6 tou4* (‘You did an *electrocardiogram*’) and *zing3 soeng4* (‘it’s *normal*’) respectively. Message 236, by contrast, selected the SPEECH FUNCTION: ACKNOWLEDGEMENT, or more precisely, a punctuative message selecting the feature [**maintaining: reactive**] as in *o6* (‘*Uh*’).

Central to this dialogical interaction is its explanatory nature. As Slade and her colleagues observe, diagnosis in emergency department is explanatory – doctors have to provide ‘explanations of what the diagnosis means to patients’. In view of this, the semantic act

of delivering diagnosis is particularly relevant to the system of CONTINUATION, a semantic system in Cantonese which enables doctors to explain *what* the diagnosis means and *how* and *why* the medical phenomenon happen. In a message semantic sense, the act of delivering diagnosis selected semantic option **[elaboration]** so that each act of giving diagnosis was logically ‘related’ by its supplementing messages (see **[related]** in Hasan, 2009n[2004]: 446). For example, message 241 and message 242 stood in an elaborating relationship. The selection of semantic features **[non-supplemented; supplementing: elaboration: covert]** in message 242 *bei2 gaau3 gou1 laa1* (‘that’s relatively high’) served to clarify the meaning of message 241 *gam2 lai4 dou3 go2 hyut3 aat3 heoi3 dou3 jat1 baak3 gau2 sap6 gei2 jau6* (‘Now the blood pressure has reached around 190’) by making the meaning of ‘blood pressure 190’ explicit to Crystal.

By the same token, message 244 to 248 constituted two semantic acts of giving diagnosis, viz., message 244 –245 and message 246 – 248. With regard to the former, message 245 overtly expanded message 244 *ze1 hai6 ji4 gaa1 mou5 gam2 wan4 ne1* (‘that means you’re not that dizzy now’), selecting the semantic features **[non-supplemented: supplementing: elaboration; overt]**. In a semantic sense, the logical elaboration served as a restatement or paraphrase of message 245. With regard to the latter, message 247 and message 248 selected the feature **[supplemented: supplementing: elaboration: covert]** and **[non-supplemented: supplementing: elaboration: overt]** respectively.

Like message 244, the supplementing messages here functioned to provide medical clarifications to the diagnosis. However, what is unique here is that the elaborating

relation is construed univariately in an **additive** fashion. For instance, message 246 *hyut3 aat3 dou1 zing3 soeng4 faan1* ('your blood pressure gets to the normal range') was first clarified by message 247 through a specification of normal range of blood pressure, which was further elaborated by another 'explanatory comment' in message 248 as in *zau6 wan2 ding6* ('then you're stable') (see Halliday and Matthiessen, 2014, p 463). Figure 7.11 represents the intrinsic relations of the semantic act of diagnostic planning within context, semantics and lexicogrammar.

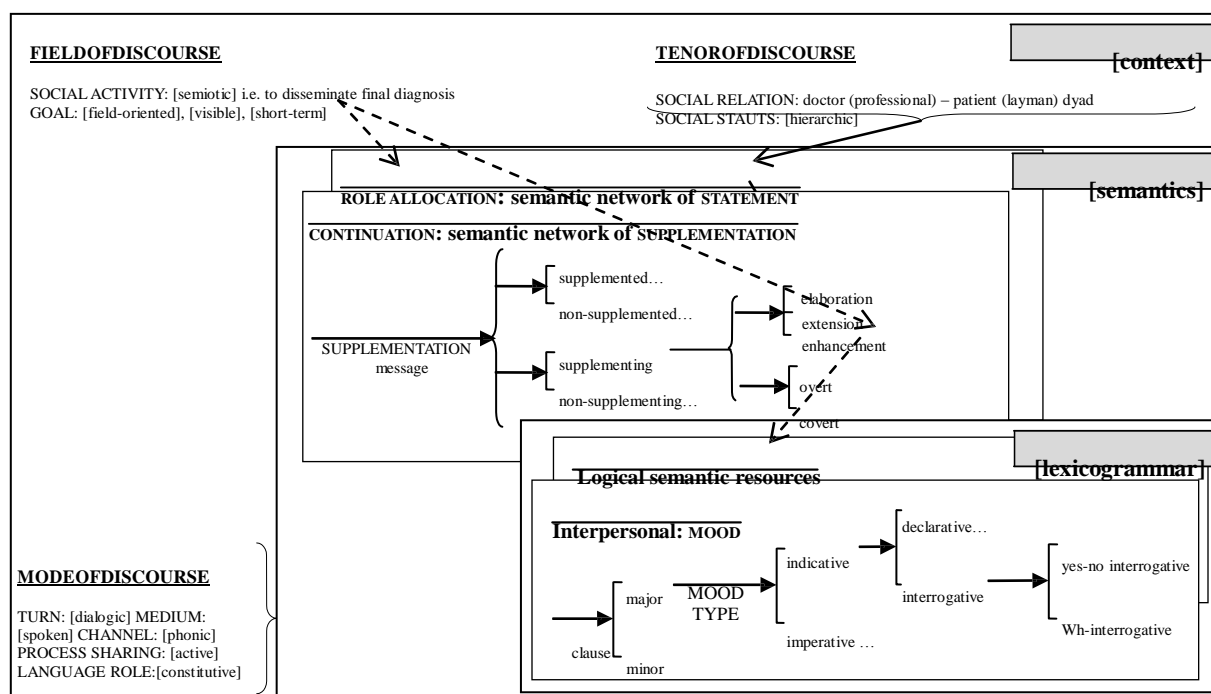


Figure 7.7 The intrinsic relations within context, semantics and lexicogrammar in the semantic act of delivering diagnosis in Crystal's Final Diagnosis (FD)

7.5.1.2.1.1 The semantic act of enacting stance

With regard to the latter, the **semantic act of enacting stance** *primarily* correlates with the favoured selection in the TENOR OF DISCOURSE. In the stage of FD, the interpersonal

stance embodied in the act of enacting stance is, *by and large*, **[assertive]**. The habitual selection of **[assertive]** here highlights the contextual tension between FIELD and TENOR in the emergency context – the delivery of diagnosis should not be deemed as a mere field-based medical activity; it is, in essence, a calibration of the interpersonal relation.

From a message semantic point of view, the assertive stance is a multi-stratal constructs – it calibrates with semantics, lexicogrammar¹⁰⁹ and phonology¹¹⁰; each of which plays a role in attitudinal meaning construal. Viewed ‘from roundabout’, these acts enter the system of ATTITUDINAL ASSESSMENT, a sub-system of RELATION ENACTMENT which aims to demystify interpersonal judgement from the perspectives of SPEAKER-ORIENTATION, MESSAGE-ORIENTATION and HEARER-ORIENTATION (see Chapter 6, Section 6.3.5.2). For instance, in delivering medical test results (i.e. msg 224 – 241), the emergency doctor enacted a series of semantic acts of enacting stance through **[giving; information]** as in 224, 225, 227 – 229, 231, 232, 234 – 238. Here, the meaning of each giving act was **interpersonally judged**, selecting the feature **[speaker-oriented: assertive; message-oriented: neutral]**. The selection thus suggests that the **semantic assertiveness** is of dual orientation – it is a product of the exchange of (i) proposition and (ii) attitude in which the emergency doctor (i.e. appraiser) enacts her assertive stance regarding the propositional content towards Crystal (i.e. the targeted audience being appraised) through interpersonal exchanges (cf. DECLARATIVE FORCE in Halliday and

¹⁰⁹ This contrasts with Martin’s Sydney School in which attitudinal lexis is conceptualised as discourse semantic resources (see APPRAISAL in Martin and White, 2005).

¹¹⁰ In a theoretical sense, voice-quality, the paralinguistic features of a language, is also considered as a meaning-bearing resource (see Wan, 2012 for a discussion of voice quality in call centre industry). Given that the current thesis is a discourse study of ED interaction, the research focus concerns only the stratum of lexicogrammar and phonology.

Greaves, 2008).

Viewed from ‘below’, the assertive meaning was lexicogrammatically realised through MOOD TYPE and MODAL ASSESSMENT under the interpersonal metafunction¹¹¹ (Halliday and Matthiessen, 2014), and phonologically as pitch movement in both utterance body intonation and utterance final intonation¹¹². Lexicogrammatically, the acts of enacting stance were realised by [declarative] clauses; each of which was **modally assessed** under the system of MODAL ASSESSMENT. In the language system of Cantonese, assertiveness was enacted through the employment of assessment resources such as interpersonal metaphor (e.g. *ngo5 gok3 dak1* or *ngo5 gu2* literally as ‘*I think...*’ or ‘*I guess...*’ in English), low-value modalisation (e.g. *ho2 nang4* ‘maybe’ or *waak6 ze2* ‘or’) and interpersonal particle of tentative type (e.g. *ge3* and *gwaa3*) (see Tam, 2004 for a systemic functional account of Cantonese lexicogrammar). The employment of these lexicogrammatical assessment resources was, in turn, realised phonologically as a falling intonation contour (i.e. both utterance body intonation and utterance final intonation). In a Cantonese phonological sense, a falling prosodic contour across utterances is attitudinally-loaded – it signals interlocutor’s sense of certainty in a dialogic exchange (see Leung, 2005, p. 83; see also Matthews and Yip, 2011, Tang, 2015 and many others).

For instance, the diagnosis enacted in message complex 224 – 225 i.e. *zou6 zo2 sam1*

¹¹¹ For lack of space, I simply focus on the major realisational relation within interpersonal metafunction. This does not exclude the case that attitudinal meanings are realised experientially through TRANSITIVITY (Matthiessen, personal communication, see also Halliday and Matthiessen, 2006).

¹¹² By far, the lion’s share of Cantonese SFL studies focuses on semantics and lexicogrammar; little phonological research has been conducted in a systemic functional fashion (see Choi, 2003 for exception). The proposed systemic contrast in Cantonese pitch movement only serves as a simplified account of recent Cantonese phonology research (see Fox *et al.*, 2008 for a recent discussion).

din6 tou4, zing3 soeng4 ('You did an electrocardiogram, it's normal'). Viewed 'from roundabout', the message complex selected [**assertive; neutral**] in which the doctor's assertiveness was loaded in message 225, serving as a dialogistic explanation of electrocardiogram result. The semantic assertiveness entailed in this message complex was grammaticalised 'from below' – the realising clauses complex was modally assessed, and was enacted as a bare assertion in which the falling pitch movement extended across the entire clause complex. More specifically, the falling contour displayed two continuing downward slopes as in message 224 and message 225 respectively; each of which selected falling tone in both utterance body intonation and utterance final intonation (see Choi, 2003). Had the doctor uttered *doul zing3 soeng4 ge3* ('It's sort of normal'), the semantic assertiveness would have become [**tentative; mild**]. That is to say, the semantic sense of reservation is grammaticalised through the selection of interpersonal particle *ge3* and is phonologicalised as a final rising tone in the utterance final intonation. The intrinsic relation across strata within the semantic act of enacting stance is represented diagrammatically in Figure 7.8.

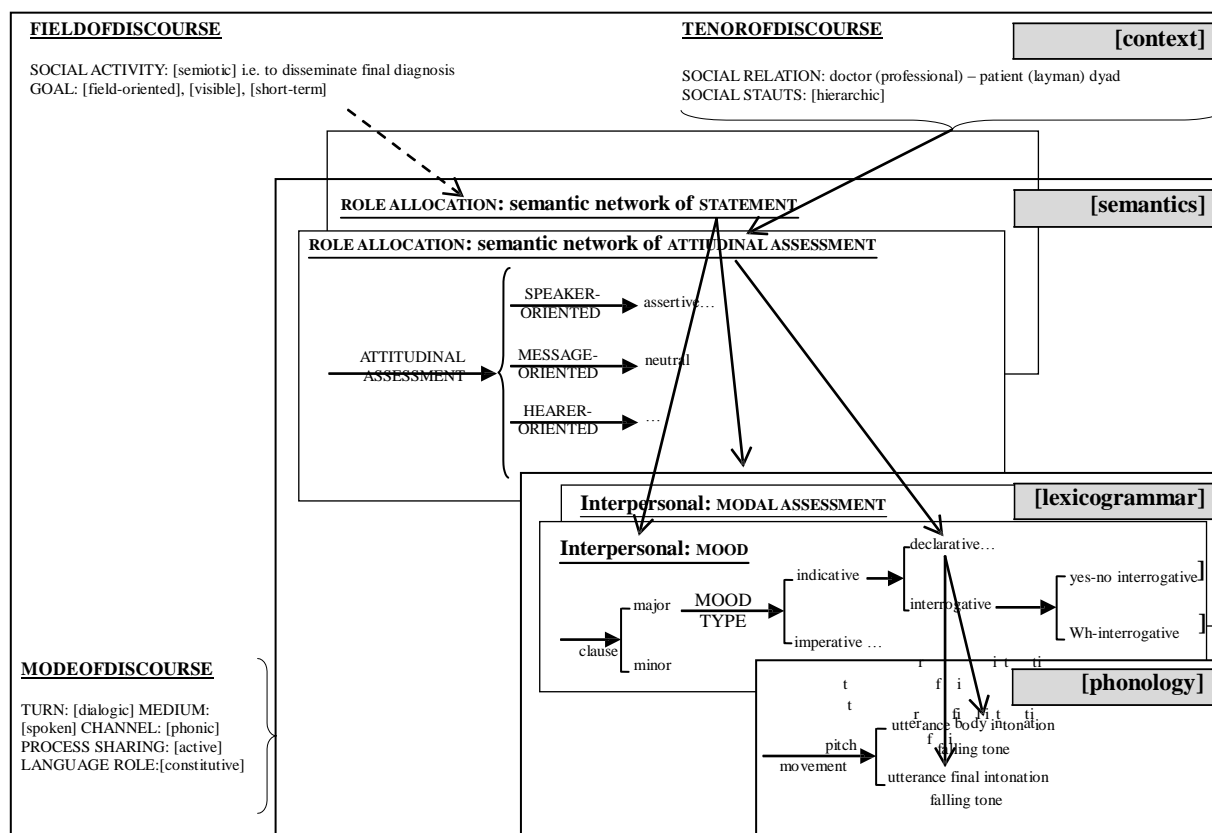


Figure 7.8 The intrinsic relations within context, semantics and lexicogrammar in the semantic act of enacting stance in Crystal's Final Diagnosis (FD)

7.5.2 Meaning-as-product: a comparison of generic elements across various models

Viewed from the perspective of meaning-as-product, it is found that the ED structural model, to a certain extent, displays structural consistence.

(i) Existing medical consultation models

Compared with the existing consultation models presented in Table 7.1, the proposed model can be regarded as an elaborated account of the traditional description,

pushing the descriptive delicacy of generic elements so as to capture the pressing contextual demands of ED context.

Table 7.5 A comparison of structural elements of medical consultation

Traditional 6-phase element	Proposed model in this study
<i>Greetings and opening</i>	Greetings (G); Identification (I); Allergy Check (AC);
<i>Presentation of complaint</i>	Problem Presentation (PP); History Taking (HT);
<i>Examination</i>	Physical Examination (PE); Diagnostic Plan (DP); Clinical Tests (CT);
<i>Diagnosis</i>	Initial Diagnosis (ID); Final Diagnosis (FD);
-	Immediate Treatment (IT); Prospective Treatment (PT);
<i>Establishment of a therapeutic plan</i>	Treatment Negotiation (TN);
-	Admission Negotiation (AN); Admission;
<i>Closing of the talk</i>	Discharge (DC); Dismissal (DM); Finale (F)

(ii) A&ED Flowchart

Figure 7.9 is the emergency department consultation flowchart, which is taken in one local Hong Kong ED department (see Matthiessen, 2013). It aims to provide patients with information about the stages throughout the emergency visit. If we compare the proposed model of this study, it is found that the locus of medical encounter lies in Phase 1 to Phase 6, which is displayed in pink area in Figure 7.9.

Phase 1 to Phase 5

Identification (I)
Greeting (G)
Allergy Checking (AC)
Problem Presentation (PP)
History Taking (HT)
Physical Examination (PE)
Initial Diagnosis (ID)
Final Diagnosis (FD)

Phase 6

Treatment Negotiation (TN)
Prospective Treatment (TN)

Phase 6

Discharge (DC)
Admission
Negotiation (AN)
Finis (F)
Dimissal (DM)
Finale (F)

Phase 3

Immediate Treatment (IT)

Phase 4

Clinical Test (CT)



Activity stage I:
Initial medical
consultation

Activity stage II:
Final medical
consultation

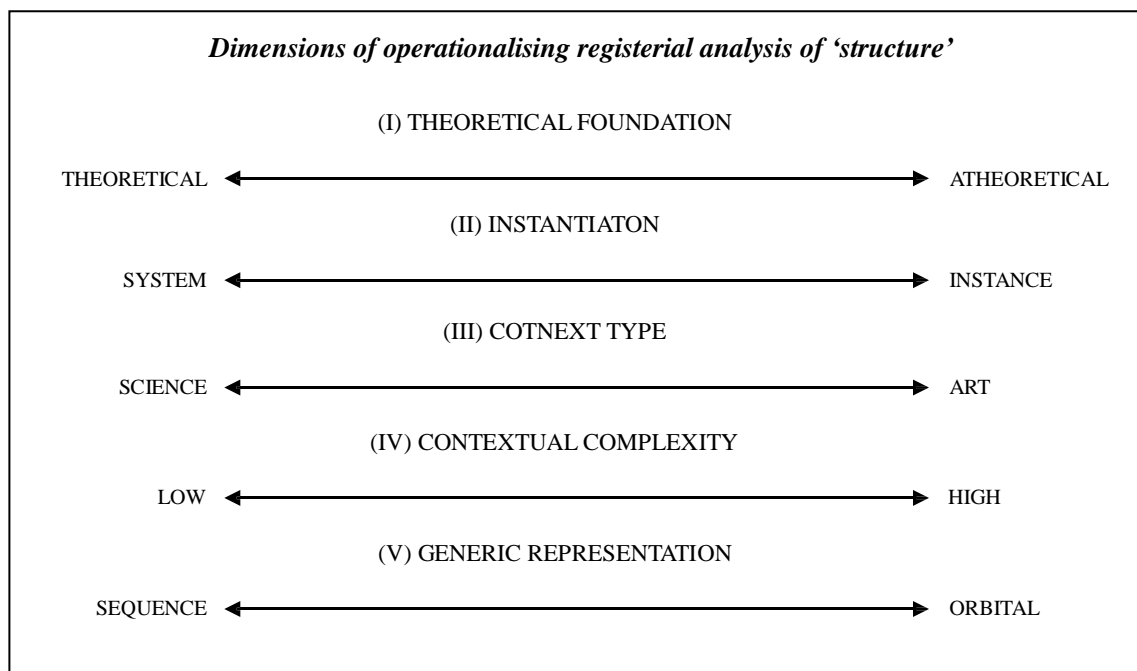
Figure 7.9 A comparison of ED patient journey's generic element and ED flowchart

7.6 Implications of modelling the *structure* of patient journey

Before closing this chapter, let me present a brief discussion concerning Hasan's notion of GSP, and more precisely, its applicability in ED context. As mentioned Section 7.3, the modelling of the *structure* of patient journey is theoretically-driven, drawing on Hasan's notion of *text*, *register* and *structure*. Despite a productive account of the multidimensional structural meanings – as *system*, as *instance*, as *process* and as *product* – it appears to me that some research pressures and some relevant registerial notion deserved to be noted.

7.6.1 Addition of conditional marking convention in GSP statement

One major implication is that we need to expand her theoretical and descriptive view on 'structure' so as to deal with the growing contextual complexity in 21st century. As discussed, *structure* is one key aspect in exploring registerial identity in Hasanian tradition. In operationanlising structural analysis in registerial study, one can conceptualise it in terms of four dimensions (see Figure 7.10).



As the name implies in Figure 7.10, dimension (i) concerns the degree of theorisation of structural analysis; dimension (ii) concerns the degree of potentiality, whether it is oriented to system, instance or both; dimension (iii) concerns whether the type of context is of ‘science’ or of ‘art’ – the former denotes fix, case-insepctific practices whereas the latter as creative, dynamic practices, dimension (iv) concerns the degree of contextual complexity, whether it is of high contextual complexity or low one and dimension (v) concerns the mode of representation, whether that prioritises sequential ordering or patterning.

As shown in the ED data analysis, it is found that Hasan's GSP model *typically* priorities dimension (i) and (ii) over (iii), (iv) and (v). In today's view, such a prioritisation reflected a

growing research demand on structure within the SFL community in early 1980s (e.g. Hasan, 2011c [1978] and 2011e [1981]). With the growing registerial and contextual complexity, it appears necessary to expand her insights through (i) an addition of conditional marking in GSP convention, and (ii) a complementary view between linear and orbital representation so as to respond the on-going research pressure that we are encountering in 21st century.

If we view Hasan's GSP model in terms of the cline of contextual complexity, it seems to that her work is more or less located near the pole of low complexity. This is not surprising in a sense that her description is, more or less, a generalisation of her account of shopping transactions (Hasan, 2011c [1978] and 2011e [1981]). As Matthiessen (personal communication) notes, the register of shopping enquiry, in today's view, is rather simple, i.e. it is a daily social practice involving a rather straightforward and transactional use of language. In Hasan's work, it is fascinatingly captured by her condensed statement $[(< G > \bullet) (SI) ^ \wedge] [(SE \bullet) ^ n \{ SR ^ \wedge SC ^ \wedge \} ^ n ^ \wedge S ^ \wedge] ^ \wedge P ^ \wedge PC (^ \wedge F)$ (Hasan, 1979, p. 392).

This contrasts with ED medical consultation in which it is of crucial communicative site and of critical communicative event in modern hospital. More specifically, the context type is more or less inclined towards art, in that the professional practice entails a sense of artistry (Sarangi and Candlin, 2010, see Chapter 1 Section 1.2.2), and the contextual complexity of ED encounter is far complicated than that of shopping encounter. For instance, *contra* shopping transaction, the goal orientation of ED doctor-patient communication is more complicated, entailing a variety of short-term goals and one major long-term goal throughout the entire patient journey (see Chapter 3 Section 3.9.2). The achievement of these sub-goals in turns

leads to various flexible ‘pathways’, selecting different generic elements in *Phase 7 Disposition* and more specifically, the various structural organisation of the entire doctor – patient consultation.

Acknowledging Hasan’s (1978) GSP model is still meaningful in discriminating the generic elements as well as sequential ordering, her insight is, unfortunately, rather limited in capturing the possibility of pathway selection as in ED context. Ventola (1987, p. 70 – 76) has once identified this problem, arguing that a flowchart representation is possibly an alternate to deal with the strict restriction regarding the unfolding elements. It, however, remains illusive that a generative representation of this kind is still theory-driven and or just a mere diagrammatic representation visualizing the process of conditioning in a dynamic basis.

To resolve this pressing research demand in a synoptic manner, it appears necessary to expand Hasan’s description by adding conditioning marking¹¹³, drawing on the notation from systemic convention (Halliday and Matthiessen, 2009; Martin, 2013). The extension of descriptive technique here serves only an initial attempt in resolving (1) the tension between synoptic and dynamic modeling of structure, (2) the distinction between theoretical and atheoretical modeling and (3) the descriptive complications in ED patient journeys.

¹¹³ It should be emphasised that this does not violate the tension between synoptic modelling and dynamic modelling as upheld by Hasan. As Hasan (2011 [1984]) argues, her GSP model is always synoptic, shedding light in capturing the sequential ordering of generic elements across genre (i.e. meaning-as-product). This contrasts with those exchange structure and adjacency pairs analysis which illustrate the dynamic view of spoken discourse (i.e. meaning-as-process).

7.6.2 Reflection on ‘registerial identity’ and ‘intra-registerial variation’

Another implication stemmed from Hasan’s GSP analysis of ED patient journey is to reflect on Hasan’s early notion of ‘registerial identity’ and ‘intra-registerial variation’ (see Moore, 2016 for a recent discussion). As discussed in Section 7.3, Hasan’s conception of registerial identity lies in both *structure* and *texture*. As far as *structure* is concerned, Hasan argues that any text belonging to the same register should exhibit the same structural organisation; both in terms of (i) the existence of obligatory elements and (ii) the fixity of these obligatory elements (see Halliday and Hasan, 1985). More precisely, it is the mediation of *contextual configuration*, *register* and *structure* which contributes to the registerial structures (i.e. GSP and AGS).

While her claim holds true in most research contexts (except verbal art), it appears that it is less valid in institutional context as in ED. This is particularly true that the interaction *per se* is *linguistically* manifested in discourse but *institutionally* embedded in the hospital culture. More specifically, it is these very culture which allow emergency doctor to practice the ‘doctor’s autonomy’. One typical case in point is the severity of patient’s illness. In ED context, illness severity is always placed as the first consideration. Depending on the severity of patient’s illness, emergency doctors could conduct medical interview in an artistic manner (Sarangi and Candlin, 2010, p. 3 – 4), resulting in a *non-typical-ideal* structural organisation, with orders of elements which are either non-sequential or incompleted. Consider the actualized structure of the medical encounters of Crystal, Sean and Ada.

Crystal **IMC:** I^G^AC ^ PP ^ HT ^ PE ^ HT ^ PE ^ HT ^ PE ^ DP ^ TN ^ (DP/PE) ^
DP ^ CT

FMC: $I \wedge FD \wedge TN \wedge PT \wedge DM \wedge AN \wedge DC \wedge AN \wedge DC$
***TMC:** $PI \wedge DC \wedge PT$

Sean **IMC:** $\underline{AC} \wedge HT \wedge PE \wedge HT \wedge DP \wedge ID \wedge CT$
FMC: $\underline{I} \wedge FD \wedge PT \wedge DC \wedge DM \wedge DC \wedge DM \wedge F$

Ada $I \wedge G \wedge PP \wedge HT \wedge PE \wedge HT \wedge FD \wedge TN \wedge AN \wedge TN \wedge TN/DC \wedge DC \wedge \underline{AC} \wedge \underline{I} \wedge DM \wedge$
 $F \wedge DC \wedge F$

Figure 7.11 A comparison of Crystal, Sean and Ada’s patient journeys

As illustrated in Figure 7.11, while the generic elements AC and I are obligatory, their positioning, in practice, is never absolute; they are located in either the initial or the final position¹¹⁴. Such kind of discrepancy, in my view, is not contradictory to Hasan’s notion of ‘register’ or ‘registerial identity’, but is, indeed, a reflection of the pressing contextual demand. It should be emphasised that these contextual pressures is situational, which lies beyond the contextual configuration of the interaction. In other words, it is these very external situational factors which lead to the ultimate structural shape of the instance. While this view remains further examination, it is cautious to claim that the variation of this kind is register-specific – it is a kind of variation within a given register, and the structural discrepancy exhibited in the actualised instances should not be interpreted as another register.

7.7 Chapter Summary

This chapter has explored the registerial identity of ED consultation through analysing the

¹¹⁴ Another possible view is somewhat advocated by Martin (1992) in which generic elements are arranged in orbital with dependency. That is, while obligatory generic element share the same obligatoriness, they can be further classified as either core or peripheral.

structure of medical encounter in emergency context. Drawing on Hasan's GSP model, it examines both REGISTERIAL STRUCTURE POTENTIAL (GSP) and ACUTALISED GLOBAL INSTANCE (AGS). In addition, it demonstrates how the structural meanings are realised through generic elements as a cross-stratal calibration from context, semantics and lexicogrammar. This chapter ends with a discussion on the research implication in applying Hasan's GSP model in analysing the structural organisation of ED consultation in hospital context.

Chapter 8

CONCLUSION

8.1 Introduction

Serving as the final chapter of this thesis, Chapter 9 wraps up the entire research project. Section 8.2 summaries the research findings of this current project with regard to the three *G-RQs* and their respective *S-RQs*. Section 8.3 illustrates the research implication, detailing its applicability and social accountability of Cantonese message semantic networks. Section 8.4 discusses limitations of this project, addressing some issues relevant to the research methodology as well as research design. Finally, Section 8.5 projects the further research directions, based on the reflections upon the limitation discussed in the previous section.

8.2 Summary of this Research Project

This section offers a summary of this research project. As set out in Chapter 1, the present project researches on ‘language in exchange’, with a multi-phenomenal focus spanning four fronts of investigations: (i) healthcare communication, (ii) register analysis, (iii) Cantonese linguistics and (iv) functional semantics. More precisely, the study features SFL as analytical framework, taking account of a number of research activities in relation to the aforementioned areas:

in relation to ‘healthcare communication’: to *demystify* the discursive practices of ED medical counter as professional communication;

in relational to ‘register analysis’: to *analyze* the registerial structure of ED patient journey under Hallidayan notion of register;

in relation to ‘Cantonese linguistics’: to *uphold* the notion of ‘applied linguistics’ in Cantonese linguistic studies, featuring (systemic) functional description as discourse analytical framework;

in relation to ‘systemic functional semantics’: to *describe* the Cantonese semantics through Hasan’s notion of message semantics;

By taking Hong Kong hospital emergency department as the institutional setting of investigation, this current study describes the semantics of medical behaviour in Cantonese doctor-patient communication through a systemic functional exploration of meanings in relation to *context* and *register*. More specifically, three broad research questions are established, and are rehearsed as below:

G-RQ-1: How are the Cantonese message semantic networks conceptualised?

G-RQ-2: What is the registerial identity of ED doctor-patient communication?

Narrow as the focus is, this systemic engagement in these three *G-RQs* yields a rich description of different manifestations of meanings of ED medical consultation. The following sections summarise the three findings of the two research phases.

8.2.1 Summary of Phase 1 findings

Phase 1 serves to address the *G-RQ1* *How are the Cantonese message semantic networks conceptualised?* In this phase, it commences with an observation of how the progression of discourse operate dialogically within systemic functional theory. In a sense, if the semantic unit *message* of Cantonese language system is theorised, an argument of discriminating language exhaustive meaning options against their respective lexicogrammatical realisation can be accordingly advanced.

Following the theoretical and descriptive guidance presented in Chapter 5 Section 5.5.1, it is found that despite the disparity between English and Cantonese language system, the semantic networks, at the very least delicacy, shares high similarity. In a message semantic sense, both Hasan's English message semantic network and the Cantonese one operate within the 'multidimensional semiotic space of language in context' (Caffarel *et al.*, 2004, p. 18), featuring the same systemic notions as in (1) open context, (2) unit of analysis, (3) trinocularly and (4) metafunctional regulation (see Chapter 4 Section 4.3). It is, perhaps, not surprisingly that both of them take a similar overall systemic organisation, or more precisely, a simultaneous system embracing RELATION ENACTMENT (including QUESTION and ANSWER), CONTINUATION, AMPLIFICATION and CLASSIFICATION as member systems. A comparison of English and Cantonese semantic networks suggests that while both of them share a similar overall organisation, the proposed Cantonese networks are distinctive from English's one for two senses: (i) subtle distinction among meaning options and systemic relations and (ii) different lexicogrammatical realisations in two language systems. In other words, the Cantonese systems should not be deemed as a direct transfer or a modified account from the

English one. This individual account thus serves a valuable discourse tool in describing Cantonese discourse (see Section 9.3 for a detailed discussion).

8.2.2 Summary of Phase 2 findings

Phase 2 intends to address the *G-RQ2 What is the registerial identity of ED doctor-patient communication?* More specifically, it addressees the meanings of registerial structures of patient journey from Hasan's notion of text. By taking a trinocular perspective, the analysis explores the structure *from above*, *from roundabout* and *from below*. The findings from textual analysis suggest that the schematic structure of patient journeys is consisted of eighteen generic elements organised in a linear fashion:

GSP of IMC:	$[(\langle G \rangle) \bullet PI] \wedge AC \quad [^{\wedge} (PP) \wedge \langle HT^n \rangle \wedge \langle PE^n \rangle] \wedge [(ID) \wedge (IT)] \wedge [DP \wedge CT]$
----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------

GSP of FMC:	$[(\langle G \rangle) \bullet PI] \quad ^{\wedge} D_{\#} \wedge \#_1 AN \xrightarrow{*} \quad ^{\wedge} [\quad ^{*1} A] / [[\quad \xrightarrow{*2} \langle PT \rangle \wedge \langle TN^n \rangle \wedge \langle DC^n \rangle] \wedge [DM \wedge (F)]]$
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KEY: Initial Medical Consultation (IMF); Final Medical Consultation (FMC); Greetings (G); Identification (I); Allergy Check (AC); Problem Presentation (PP); History Taking (HT); Physical Examination (PE); Initial Diagnosis (ID); Immediate Treatment (IT); Diagnostic Plan (DP); Clinical Tests (CT); Final Diagnosis (FD); Treatment Negotiation (TN); Prospective Treatment (PT); Discharge (DC); Admission Negotiation (AN); Admission; Dismissal (DM) and Finale (F)

A comparison of these elements with the traditional organisation structure rehearsed in literature suggested they are of high similarities, that is, a 6-phase organisation. What is unique in the proposed model in this project pushes the descriptive delicacy, so that more sub-elements are captured. These 'added' elements, to a certain extent, mark a distinction between ED consultation and GP medical encounter.

This functional description of the registerial structure of ED patient journeys not only sheds light on those healthcare practitioner who are interested in the interaction in ED context, but also to (functional) linguists who are working on register analysis illustrating how Hasan's model of register is adapted to analysing institutional discourse embodying both Schon's (1987, p. 228) word of *professional practices as science* and *professional practices as artistry* – a tension between proceduration and individual autonomy in ED context. In a linguistic sense, an exploration of this tension leads us to a reflection, reconceptualisation and/or extension of the Hasan's notion of register, structure, and its associated ideas such as intra- and inter-registerial variation in both theoretical and descriptive manners.

8.3 Research significance

As a small-scaled study, it is found that the development of Cantonese semantic networks contributes to three fronts of investigation.

(i) Language typological studies

Descriptively, the systemic engagement in this study yields a rich description of meaning of ED medical consultation in the social context of Cantonese community — as *product* (i.e. meaning as a cross-stratal calibration represented in system networks); as *process* (i.e. meaning as healthcare practices); as *function* (i.e. meaning as semantic features); as *form* (i.e. meaning as lexicogrammatical realisations); as *structure* (i.e. meaning as sequence of generic elements); and as *art* (i.e. meaning as individual autonomy).

(ii) Register theory, registerial identity and structure

Theoretically, the study throws lights on Halliday register theory, and more specifically, Hasan's model of register. Throughout her academic career, Hasan herself has rehearsed her view that register is a semantic construct which is realised in both *structure* and *texture*. Despite her reiteration of the *structural identity* – both obligatoriness and fixity – in register analysis, it appears that her idea is less satisfactory in institutional contexts with pressing contextual demands as in hospital emergency department (see Hasan, 2014b for a recent discussion on her view on register and text). While the less satisfactory application can be attributed to the notion 'intra-registerial variation', or specifically, the external contextual demands which go beyond the relevant context (i.e. the severity of patient's illness or the artistry practices of emergency doctors), it is these very 'dormant force' which exerts impact on the structural shape of patient journey in actual context. Though this claim requires further examination, it, at least, shape the argument for subsequent registerial studies.

(iii) Cantonese Applicable Discourse Analysis (CADA)

Disciplinarily, this study bridge SFL and Cantonese studies, contributing to what I term as Cantonese Applicable Discourse Analysis (CADA), an emerging field of investigation in Cantonese linguistics which, as evident in the literature, has not been readily taken up by traditional (formal) grammarians/linguists. The proposed Cantonese message semantic networks thus complement the traditions of functional

semantics and language typological studies in the Cantonese language system. More specifically, the contextually-open semantic description, though it is far from language exhaustive, is linguistically ‘applicable’, which could serve as an important discourse tool in pursuing the research studies within CADA.

8.4 Research Limitations

Despite the aforementioned significance, it has to be admitted that this research is not immune to limitations. In the most general sense, the limitations fall under three categories, namely (1) *limited research data*, (2) *single register* and (3) *descriptive delicacy*.

1) Limited research data

It is recognised that the research data is of small-scale data set, which includes only ten patient journeys in one local ED department. The scarcity of data is, of course, not surprising in a sense that it is a valuable product yielded only through the collaborative effort of hospital, ED department and the research team. Although specific data control was implemented to ensure data representativeness, it is inevitable that the scarcity of data remains an issue concerned. In order to enhance the data representativeness, and in particular, the credibility of Cantonese semantic networks, it appears that a large-scale data collection is needed.

2) Single register

Similar to Hasan, the development of Cantonese message semantic networks here is driven the pressing research needs in describing the semantics of doctor – patient

consultation in the Hong Kong context (cf. *external pressure* in Matthiessen, 2009, p.14). In this case, it is perhaps not surprising that the initial mapping takes only one single register as the point of departure. The ‘register-bound’ generalisation of contextually-open meaning options, to a certain extent, can be claimed to be doing injustice to Hasan’s notion of language exhaustive semantic network. As Matthiessen and Slade (2010, p. 376) have asserted, conversation as a type of dialogic text is conceptualised as a *continuum of conversation* moving from the most conversational pole to the most pre-allocated one. The only emphasis on the task-oriented and transactional dialogue in medical consultation appears to be less favorable in capturing the full meaning potential of Cantonese semantics. One typical case in point is the enactment of attitudinal assessment in RELATION ENACTMENT in which medical consultation, *contra* gossip, is typically attitudinally unmarked (cf. pejorative evaluation in Eggins and Slade, 2006). In order to minimise the possible effects of conversational biasness, it appears necessary to include other types of talks when developing message semantic networks.

3) Generalised descriptive delicacy

Granted that the current study is of limited data and of single register, it has to be admitted that the descriptive delicacy of semantic networks in Chapter 6 has not been pushed very far. For instance, the semantic attitudes captured in ATTITUDINAL ASSESSMENT remain unfortunately an informal discussion, drawing only on the descriptive labels in Cantonese linguistic literature. The unsystematicity is indeed a compromise of the limited research data – both in terms of register (i.e. doctor-

patient communication) and the type of dialogic text (i.e. transactional conversation rather than casual conversation). As Hasan (personal communication) remarks, a language exhaustive semantic description of any given language requires a large body of data so as to account for its meaning potential, and more specifically, to test for the validity of its inherited semantic options. The inadequacy of research data in this study appears to be insufficient to achieve this huge linguistic enterprise. A corpus-based validation is thus needed.

8.5 Future research direction

To further develop this current project, there are three fronts of research directions that one can pursue.

1) A large-scale research collaboration

One important research direction is to conduct a large-scale research collaboration among hospital managerial staff, frontline medical professionals and linguists concerning the ED communication in multilingual, multicultural contexts, based on research experience of *The Hong Kong Emergency Communication Pilot Project (TMH)*. At the time of thesis writing, our PolyU healthcare research team has submitted a new application for a research grant under Research Grant Council (RGC), entitled *The patient journey through Accident and Emergency Departments: the critical role of communication*. In this collaborative project, four hospitals are targeted:

- (i) Tuen Mun Hospital (TMH) AED of the New Territories West Cluster;
- (ii) Pok Oi Hospital (POH) AED of the New Territories West Cluster;

- (iii) Queen Mary Hospital (QMH) AED of the Hong Kong West Cluster; and
- (iv) Prince of Wales Hospital (POWH) AED of the New Territories East Cluster.

More specifically, 80 patient journeys are anticipated in this hospital collaboration, with the verbal interactions recorded in both audio- and video-recordings.

2a) Developing Cantonese semantic networks through registerial cartography

Another possible research direction is to consider the systemic meaning options through the use of Cantonese language corpus. As Wu (2009, p. 128) notes, SFL has had a long tradition of using corpus in investigating language and language use. Another possible approach is to build a specialised corpus particularly for developing message semantic descriptions. In a systemic sense, the corpus compilation should follow Matthiessen's (2015a, b) registerial cartography so that conversation texts collected entail not only a bigger size and wider scope but also achieve data representativeness in terms of the eight FIELD OF ACTIVITIES. A message semantic description developed from this corpus design thus enables us to push the descriptive delicacy towards the system pole, yielding a 'language exhaustive' account of the Cantonese semantics.

2b) Validating the semantic options through existing Cantonese corpora

In validating semantic options proposed, it is always meaningful to incorporate the value of existing Cantonese corpora. An example of such is *The Hong Kong Cantonese Adult Language Corpus* (HKCAC) – an up-to-date database consisting

of spontaneous speech of sixty-nine Cantonese speakers recorded from phone-in programs and forums on the radio in Hong Kong (Leung and Law, 2001). The incorporation of HKCAC into message semantic descriptions not only enables us to further extend the descriptive delicacy, but also allows us to validate the semantic options proposed in Chapter 6.

3) Applying the semantic networks in emerging contexts in Hong Kong society

The final potential research direction is to further examine the ‘applicability’ of Cantonese message semantic networks through extending its application to other emerging situational context. To illustrate, let me turn to a funded research project¹¹⁵ that I am currently involved in viz., *Political discourses in Hong Kong: A Systemic Functional Perspective*. Directed by Eden Li Sum Hung, two other colleagues at the Open University of Hong Kong¹¹⁶ and me, this ongoing project addresses the political status quo by investigating the political discourses employed by key political figures – both government officials and Legislative Council members – in the Hong Kong context. More precisely, it focuses on the key political event ‘5-Step Process of Constitutional Development’ and its peripheral issues which lead up to the Chief Executive of the Hong Kong Special Administrative Region (HKSAR) in 2017. This on-going project has shed illuminating light on a range of linguistic issues under the gross such as political register analysis, subjectivity, discourse and role and personal reference (see Fung

¹¹⁵ This on-going project is funded by Research Grants Council (RGC) under the Faculty Development Scheme (FDS) (Ref. UGC/FDS16/H04/15, 2016-2018. HK\$ 690,719).

¹¹⁶ Other Co-Investigators include Dr. Percy Lui and Dr. John Li.

et al., 2015; Li *et al.*, 2015a, b, c; Li *et al.*, 2016).

To continue this academic endeavour, and more precisely, to examine the applicability of the Cantonese networks, one way to go is to analyse the spoken political discourse through message semantic analysis. Our political corpus – *The Corpus of Hong Kong Political Discourse* – provides a wealth of Cantonese spoken data under the register/text type such as *debate*, *interview/media session*, *news report*, *personal commentary programme*, and *political speech* (see Li *et al.*, 2015). One on-going work is Fung (in prep) in which the semantic networks of QUESTIONING and ANSWERING are applied in analysing the semantics of chief executive candidates in 2017 Chief Executive election debates.

8.6 Chapter Summary

As the concluding chapter of the thesis, this chapter reiterates the major development of Cantonese semantic networks, its research limitation, its future research direction. Recognizing many works remains to be done, the development here can be regarded a small step in Cantonese studies, SFL, and register theory.

APPENDIX I

GSP ANALYSIS OF PATIENT JOURNEYS

This section illustrates Hasan's GSP analysis of patient journeys, illustrating how the generic elements are realised through the generalized linguistic features.

Patient_01: Crystal's patient journey

Key

Participant

D: Doctor

P: Crystal

Activity Stage 1: Initial Medical Consultation

Generic element	Turn	S	Cantonese Messages	English Translation	Generalised linguistic features + Researcher comments
I	154	D	(1) Crystal	(1) Crystal	Minor speech-functional exchange: [punctuative] message ↘ minor clause of calling types, preselecting name-based Vocative
I	155	P	(2) hai6 hai6 hai6 hai6	(2) Ye–ye–ye–yes.	
G	156	D	(3) nei5 hou2	(3) Hello.	Minor speech-functional exchange: [punctuative] message ↘ minor clause of greetings
AC	156	D	(4) jau5 mou5 joek6mat6man5gam2 aa3 ?	(4) Do you have any drug allergies?	Propositional exchange: QUESTION ^ ANSWER QUESTION TYPES : varied [ask] questions (i.e. msg 4, 11, 12) [apprize] questions (i.e. msg 83) Experiential domain conflates with
AC	157	P	(5) e6...jau5 aa3	(5) Ah... yes,	
AC	157	P	(6) jau5 zek3 tau4wan4 go2 di1	(6) There's one type for dizziness,	
AC	158	D	(7) dim2 wan4 gaa3 ?	(7) Dizzy how?	
AC	159	P	(8) e6..., ngo5 sik6 zo2 keoi5 ne1,	(8) Ah... I take this,	
AC	159	P	(9) wui2, e6, go3 zeoi2me2 gaa3	(9) my mouth would, ah, twist to one side.	
AC	159	P	(10) e6 ni1 zek3	(10) Ah, this one.	
AC	160	D	(11) zeoi2me2?	(11) Your mouth twists?	
AC	160	D	(12) me2 maai4 jat1 bin6 aa4 ?	(12) Twists to one side?	

AC	161	P	(13) hai6 aa3 hai6 aa3 !	(13) Right–Right!	<p>drug allergy <i>joek6 mat6 man5 gam2</i> as in msg 4, 6 11 (see underlined)</p> <p>Indefiniteness i.e. the realises of the ‘drug allergy’ is general class of phenomenon</p> <p>Event orientation habituality: non-habitual realis: prior spatial proximity: close</p>
AC	162	D	(14) o2–o2–o2.	(14) Uh–uh–uh.	
AC	162	D	(15) hou2 laa1.	(15) Okay!	
PP	163	D	(16) gin3 me1 si6 aa3?	(16) What’s the matter?	<p>Propositional exchange: QUESTION ^ ANSWER</p> <p>QUESTION : (1) Opening question preselect [natural] (i.e. open-end apprise question without built-in presupposition)</p> <p>(2) Experiential domains preselect ‘medical problem’, construed semantically as [event] and/or [evaluation] as in <i>me1 si6</i> (i.e. msg 16)</p> <p>Narrative structure: event sequenced in time: chronicling (msg 17 – 19) ↘ LOGICAL SEMANTIC RELATION</p>
PP	164	P	(17) e6... ngo5 gam1 ciu4 cat1 dim2 zung1 hei2 san1 ne1	(17) Ah... when I got up at seven o’clock this morning,	
PP	164	P	(18) zau6 tau4 wan4 laa3,	(18) I was dizzy	
PP	164	P	(19) go3 jan4 ne1 dam4 dam4 zyun2 gam2 joeng2	(19) like I was spinning and such.	
PP	165	D	(20) m6,	(20) Mm,	
PP	165	D	(21) hou2 aa3	(21) okay.	
HT	165	D	(22) cat1 dim2 zung1 hei2, hai6 mai1 aa3?	(22) At seven o’clock you==woke up, right?	<p>Propositional exchange: QUESTION ^ ANSWER</p> <p>QUESTION : (1) QUESTION TYPE: varied [ask] questions (i.e. msg 22, 28, 34) [apprize] questions (i.e. msg)</p> <p>(2) Experiential domains preselect ‘medical problem’, construed semantically as [event] (i.e. msg</p>
HT	166	P	(23) ==hei2–hei2 cong4.	(23) ==Out–out of bed.	
HT	167	D	(24) == jau5 mou5 bat1 sing2 jan4 si6 go2 di1 aa3 ?	(24) ==Did you pass out and such?	
HT	168	P	(25) zik1 hai6 dou1 cing1 sing2	(25) I mean, still awake,	
HT	168	P	(26) daan6 hai6 hang4 hei2 soeng6 lai4 ne1	(26) but when I walked,	
HT	168	P	(27) zau6 zong1 haa2 zong1 haa2.	(27) I dipped and dipped.	
HT	169	D	(28) jau5 mou5 au2 dou3 gam2 joeng2 aa1 ?	(28) Did you vomit or something ?	
HT	170	P	(29) e6,mei6 jau5 au2.	(29) Ah, not yet.	
HT	171	D	(30) dou1 hai6 hang4 dak1 dou2 ge3	(30) You were still ambulatory.	
HT	171	D	(31) jau5 mou5 dit1 gwo3 aa3 gam2 joeng2?	(31) Did you fall or something?	
HT	172	P	(32) dou1 jiu3 fu4 zyu6 aa3.	(32) I needed support.	
HT	173	D	(33) o6.	(33) Uh.	

HT	173	D	(34) jau5 mou5 dou3 ham2 dou3 tau4?	(34) Did you hit your head?
HT	174	P	(35) e6, go2 di1 mou5.	(35) Ah... not that kind of thing.
HT	175	D	(36) mou5.	(36) No.
HT	175	D	(37) nei1 gei2 jat6 jau5 mou5 sam1 hau2 m4 syu1 fuk6 aa1?	(37) Did your chest feel uncomfortable these few days?
HT	176	P	(38) m6... daan6 hai6 nei4 paai4 ne1 - zik1 hai6 go3 sam1 ne1 zau6 hou2 hing3 gam2 joeng2 lo1.	(38) Mm... But these days my chest feels like burning or something.
HT	177	D	(39) daan6 hai6 mou5 waa6 tung3 go2 di1 ge3==	(39) But did you feel pain==
HT	177	D	(40) ai3 zyu6 go2 di1 ge3 mou5 ge3?	(40) or tight around the chest?
HT	178	P	(41) ==mou5 !	(41) ==No!
HT	178	P	(42) ai3 zyu6 jau5.	(42) Tight, yes.
HT	178	P	(43) sam1 hing3	(43) My chest burned
HT	178	P	(44) tung4 maai4 ai3 zyu6.	(44) and felt tight.
HT	178	P	(45) tung4 maai4 ne1 tiu4 lei6 ne1,hou2 ci5 hou2 laa5 zyu6 gam2 joeng2 lo1.	(45) And my tongue, like, felt very tight.
HT	179	D	(46) sau2 goek3 jau5 mou5 m4 syu1 fuk6?	(46) Anything uncomfortable with your limbs?
HT	179	D	(47) jau5 mou5 waa6 jat1 bin1 sau2 mou5 lik6?	(47) Does one of your arms feel limp?
HT	180	P	(48) mou5.	(48) No.
HT	180	P	(49) daan6 hai6 ji4 gaa1 ne1 zek3 goek3 — jau6 m4 zi1 hai6 mai6 co5 dak1 go2 gaa3 tau4 sin1 sap6 zi6 ce1 noi6 ne1,	(49) But now this leg—not sure if it’s because I was in the ambulance just now for so long,
HT	180	P	(50) ji4 gaa1 goek3 hou2 bei3 lo1.	(50) my legs now feel very numb.
HT	181	D	(51) gam2 jau6 mei6 bit1 gwaan1 si6 ge2.	(51) Now that might not be relevant.
HT	182	P	(52) hai6 lo1	(52) Right
HT	183	D	(53) hai6 lo1	(53) Right
HT	183	D	(54) o1 au2 go2 di1 zau6 mou5 laa1?	(54) You didn’t vomit or have the runs?
HT	183	D	(55) tau4 sin1 gong2 zo2.	(55) We talked about it.
HT	184	P	(56) aa3,go2 di1 zau6 mou5.	(56) Ah, nothing of the sort.
HT	185	D	(57) daai6 bin6 jau5 mou5 o1 hyut3 aa3?	(57) Any bleeding when you pass stool?
HT	186	P	(58) mou5 aa3	(58) No,
HT	186	P	(59) daai6 bin6 m4 hai6 hou2 coeng3 tung1==aa3 zan1 hai6.	(59) not so smoothly though==really.
HT	187	D	(60) == nei5 jau5 mou5 sik6 zo2 di1 me1 joek6 gaau2 dou3 wan4 aa3?	(60) ==Did you take any meds that made you dizzy?
HT	188	P	(61) mou5 aa3.	(61) No.
HT	188	P	(62) le2 ngo5 lam4 fan3	(62) Ah, before going to bed
HT	188	P	(63) zau6 wui2 sik6 jat1 nap1 on1 min4 joek6 lo1.	(63) I’d take a sleeping pill.
HT	189	D	(64) ng6,	(64) Mm,
HT	189	D	(65) hou2 aa3.	(65) right.
HT	189	D	(66) zik1 hai6 bat1 lau1 sik6 hoi1 gaa3 laa1?	(66) That means you take it regularly?
HT	190	P	(67) hai6 aa3 hai6 aa3 !	(67) Right–Right!
HT	191	D	(68) zuk1 sat6 ngo5	(68) Hold on to me tight
HT	191	D	(69) tai2 haa6 jau5 mou5 lik6 sin1?	(69) and see if you can exert force

22, 24 and 26) and/or [evaluation]
(i.e. msg 37, 39 and 46)

Interrogative structure

Q &A sequences organised serially in an interrogation-like organisation

Event orientation

habituality: non-habitual
realis: prior
spatial proximity: close

Same as above

HT	192	D	(70) daan6 hai6 nei5 sik6 kei4 taal zi2 wan4 joek6	(70) But when you take other types of meds for dizziness,
HT	192	D	(71) wui2 m4 wui2... gam2 joeng6 aa3?.	(71) will you... feel this way?
HT	192	D	(72) zik1 hai6 [...] nei5 jan1 wai6 go2 zek3 joek6 hou2 do1 jan4 dou1 jau5 wo3	(72) I mean [...] many folks have the same meds as you.
HT	193	P	(73) hai6 aa3	(73) Right,
HT	193	P	(74) jan1 wai6 ngo5 hai6 hai2 ji1 jyun2,	(74) because it's from this hospital,
HT	193	P	(75) ngo5 dou1 lyut3 gwo3==gaa3 laa3.	(75) I got it [the medication]==too.
HT	194	D	(76) ==hou2 aa3.	(76) ==Good.
HT	194	D	(77) nei5 jau5 mou5 hyut3 aat3 gou1 gaa3 bun2 san1?	(77) Do you have hypertension?
HT	195	P	(78) ngo5... soeng6 nin2 sap6 jat1 jyut6 jim6 gwo3 ne1	(78) O... had a check last November...
HT	195	P	(79) zau6... mou5 hyut3 aat3 gou1	(79) I didn't have hypertension then
HT	195	P	(80) daan6 hai6 jau5 daam2 gu3 seon4.	(80) but I had high cholesterol.
HT	196	D	(81) m6,	(81) Mm,
HT	196	D	(82) hou2 aa3.	(82) I see.
HT	196	D	(83) ni1 go3 me1 lai4 gaa?	(83) What's this?
HT	197	P	(84) ni1 go3 ne1 zau6 hai6 go2 di1 ei6...	(84) Oh, this is those ah...
HT	197	P	(85) ngo5 jat6 jat6 dou1 jiu3 sik6 ge3, go2 di1 zan3 ding6 jyun4 tung4 maai4 sam1 tiu3 lai4 ge3.	(85) I have to take this every day, some sedative and meds to keep my heartbeat in check.
HT	198	D	(86) m6.	(86) Mm.
HT	199	P	(87) jan1 wai6 ngo5 jau5 go2 go3 ging1 ok3 zing3 aa3.	(87) Because I have that panic disorder.
HT	200	D	(88) hou2 aa3,	(88) Right,
HT	200	D	(89) nei5 lyut3 faan1 aa1.	(89) take it back.
HT	200	D	(90) gam2 nei5 wui2 m4 wui2 hou2 geng1 aa1 ji4 gaa1?	(90) ==Now are you feeling very nervous?
HT	201	P	(91) ==aa3	(91) ==Ahh
HT	202	P	(92) ji4 gaa1 m4 hai6 dim2 ging1 aa1,	(92) Not quite nervous now,
HT	202	P	(93) keoi5 tung4 ngo5 king1 haa2 gai3 jau6 mou5 gaa3 wo3.	(93) he [researcher] and I had a little chat and it [the panic] wasn't there.

Same as above

Turn 203 to Turn 215 omitted

PE/ HT	216	D	(94) teng1 jat1 teng1 sin1, hou2 mou5 ?	(94) Now, let's listen [to your chest] first, okay?
PE/ HT	217	P	(95) hou2 aa3 hou2 aa3.	(95) Okay-okay.
PE/ HT	218	D	(96) ping4 jat6 jau5 mou5 wan4 gaa3 ?	(96) Do you commonly feel dizzy?
PE/ HT	219	P	(97) jau5,	(97) Yeah,
PE/ HT	219	P	(98) jau5 si4==dou1 jau5 gaa3.	(98) sometimes==yeah.
PE/ HT	220	D	(99) ==dou1 wui2 gam2 joeng6 gaa3.	(99) ==You feel that way.
PE/ HT	221	P	(100) so2 ji5 ngo5 doi6 ding6 nap1 zi2 wan4 jyun4 gaa3.	(100) So I have some anti-fainting pills in my bag.
PE/ HT	222	D	(101) hou2 aa3.	(101) Alright,

Propositional exchange:
QUESTION ^ ANSWER

QUESTION :

(1) Varied QUESTION TYPE;

(2) Experiential domains preselect 'medical problem', construed semantically as [event] and/or

PE/ HT	222	D	(102) teng1 haa2 sin1.	(102) let's hear it out.	[evaluation]
					Event orientation habituality: non-habitual realis: prior spatial proximity: close Research comment: This phase appears fuzzy for doctor has not directed the patient to take material actions, but go straight to listen patient's chest through stethoscope.
[The doctor examined Crystal for around 16 seconds]					
HT	223	D	(103) nei5 go3 tou5 jau5 mou5 m4 syu1 fuk6 aa3?	(103) Does your stomach feel queasy?	Propositional exchange: QUESTION ^ ANSWER QUESTION : (3) Varied QUESTION TYPE; (4) Experiential domains preselect 'medical problem', construed semantically as [event] and/or [evaluation] Event orientation habituality: non-habitual realis: prior spatial proximity: close
HT	224	P	(104) ngo5 go3 tou5 ni1 paai4 hou2 zoeng3 lo1!	(104) It feels very bloated lately!	
HT	225	D	(105) hou2 zoeng3?	(105) Bloated?	
HT	225	D	(106) == jau5 si2 o1 gaa1 maa3, hai6 mai1 aa3?	(106) You pass stool [regularly] right?	
HT	226	P	(107) == sik6 m4 lok6 je5 aa3.	(107) ==I lost appetite.	
HT	227	P	(108) daan6 hai6 di1 daai6 bin6 hou2 ngaang6 lo1!	(108) But the stool is so hard!	
HT	227	P	(109) hou2 naan4 o1 dak1 ceot1 lo1!	(109) So hard to get it out!	
HT	228	D	(110) gam2 nei5 wui2 m4 wui2 hou2 geng1 aa3 gam1 jat6?	(110) Then do you feel anxious today?	
HT	229	P	(111) gam1 jat6 wan4 go2 si4 aa1	(111) When I felt dizzy today,	
HT	229	P	(112) geng1 aa3!	(112) I was anxious!	
HT	230	D	(113) hai6 aa3,	(113) Right	
HT	230	D	(114) gam2 joeng2.	(114) I see	
HT	231	P	(115) hai6 aa3.	(115) Right.	
HT	232	D	(116) zik1 hai6... m4 hai6 ging1 jan5 hei2 ge3, hai6 mai6 aa3?	(116) That means... It's not related to panic, right?	
PE	232	D	(117) sau2 zi2 jat1 zek3 nei5 mong6 m4 mong6 dou2?	(117) Can you see my finger ?	Proposal exchange: COMMAND ^ COMPLIACE C serves to direct Crystal to facilitate the material action (i.e. msg 124, 126 , 128) Figure of 'doing' COMMAND ↳ imperative clauses Actor: Patient Process type: Material Propositional exchange:
PE	233	P	(118) mong6 dou2.	(118) I can.	
PE	234	D	(119) mong6 zyu6 aa1,	(119) Look,	
PE	234	D	(120) jau5 mou5 bin3 zo2 gei2 zek3 aa3 ?	(120) would you see a few more?	
PE	235	P	(121) ji4 gaa1 jau6 mou5.	(121) Not now.	
PE	236	D	(122) jat1 zek3?	(122) Just one?	
PE	237	P	(123) haa6.	(123) Yes	
PE	238	D	(124) sau2 zi2 dim1 gwo3 lei4.	(124) Touch your finger to.	
PE	238	D	(125) dim3 m4 dim3 dou2 bei6 go1?	(125) Can you touch your nose?	
PE	238	D	(126) cung5 fuk1 zou6 aa1.	(126) Do it again.	
PE	238	D	(127) hai6 laa3,	(127) Right.	
PE	238	D	(128) ni1 go3 si3 haa2.	(128) Try this.	
PE	238	D	(129) dim1 gwo3 lai4,	(129) Move it,	

PE	238	D	(130) dim3 bei6 go1.	(130) Touch the nose.	<p>Q serves to solicit Crystal's response regarding the visual and bodily examination (i.e. msg 117)</p> <p>Event orientation habituality: non-habitual realis: co-current spatial proximity: near</p>
PE	238	D	(131) tai2 je5 jau5 mou5 waa6 mung4 sai3	(131) Did things blur?	
PE	238	D	(132) tai2 m4 dou3 gam2 joeng2 aa3	(132) Can you see?	
PE	239	P	(133) gam1 ciu4 wan4 go2 zan2 si4	(133) When I felt dizzy this morning,	
PE	239	P	(134) zau6 wui2 laa3.	(134) it was.	
PE	240	D	(135) ji4 gaa1 jau5 mou5?	(135) Is it happening now?	
PE	241	P	(136) ji4 gaa1 hou2 — hou2 hou2==do1.	(136) Now it's better—much, much==better.	
HT	242	D	(137) == nei5 zou6 gan2 me1 gaa3,	(137) ==What were you doing,	<p>Propositional exchange: QUESTION ^ ANSWER</p> <p>QUESTION : (5) Varied QUESTION TYPE;</p> <p>(6) Experiential domains preselect 'medical problem', construed semantically as [event] and/or [evaluation]</p> <p>Event orientation habituality: non-habitual realis: prior spatial proximity: close</p>
HT	242	D	(138) nei5 wan4 go2 zan6 si4,gam1 ziu1	(138) when you felt dizzy this morning?	
HT	243	P	(139) ngaam1 ngaam1 hei2 san1.	(139) Just out of bed.	
HT	244	D	(140) o6.	(140) Uh.	
HT	244	D	(141) wui2 m4 wui2 juk1 haa2 go3 tau4	(141) Did you feel dizzy	
HT	244	D	(142) zau6 wan4 aa1?	(142) just moving your head?	
HT	245	P	(143) e6... juk1 haa2	(143) Ah... moved just slightly	
HT	245	P	(144) dou1 wui2 aa3.	(144) I felt dizzy.	
HT	246	D	(145) jau5 mou5 gam2 mou6 aa3,ni1 gei2 jat6?	(145) Got a flu these few days?	
HT	247	P	(146) e6...mou5 wo3.	(146) Ah... No.	
HT	247	P	(147) jau6 mou5 gam2 mou6 wo3.	(147) Didn't have a cold.	
HT	248	D	(148) hai6 aa3.	(148) Right.	
HT	248	D	(149) ni1 go3 lai5 baai3,waak6 ze2 soeng6 go3 lai5 baai3 jau5 mou5 aa1?	(149) How about this week, or last week, did you?	
HT	249	P	(150) e6...dou1 mou5.	(150) Ah... no either.	
HT	250	D	(151) dou1 mou5.	(151) No either.	
PE	250	D	(152) tai2 maai4 go3 ji5 zai2 jau5 mou5 je5 jing2 hoeng2 dou2,hou2 mou5?	(152) Let's see if your ears are affected, alright?	<p>Proposal exchange: COMMAND ^ COMPLIACE C serves to direct Crystal to facilitate the material action (i.e. msg 124, 126 , 128)</p> <p>Figure of 'doing' COMMAND ↘ imperative clauses Actor: Patient Process type: Material</p> <p>Propositional exchange: Q serves to solicit Crystal's response regarding the visual and bodily examination (i.e. msg 117)</p> <p>Event orientation habituality: non-habitual</p>
PE	251	P	(153) ng6.	(153) Mm.	
PE/HT	252	D	(154) teng1 je5	(154) When you hear,	
PE/HT	252	D	(155) jau5 mou5 wang1 wang1 seng1?	(155) do you hear any echo?	
PE/HT	253	P	(156) mung4 di1 lo1,	(156) Ah... a bit vague,	
PE/HT	253	P	(157) teng1 nei5 gong2 je5 zau6.	(157) when I listen to you talking.	
PE	254	D	(158) ji5 zai2 zau6 mou5 mat1 je5.	(158) Nothing wrong with your ears.	
PE	255	P	(159) daan6 hai6 waa6 ni1 paai4 ne1 zau6 hou2 ci5 hou2 sam1 fo2 sing6 gam2 joeng2 joeng2 aa3.	(159) But lately I felt my heart was burning and such	

					realis: co-current spatial proximity: near Research comment: It is noted that the HT and PE are interspersed consecutively as one core entity of Phase 2 Uncovering Patient's condition
DP	256	D	(160) tung4 nei5 zou6 di1 gim2 caa4 sin1, hou2 mou5?	(160) Let's get some checks done, alright?	<ul style="list-style-type: none"> • Proposal exchange: OFFER ↘ imperative clauses COMMAND ↘ imperative clauses • Event orientation habituality: non-habitual realis: project spatial proximity: distal
DP	257	P	(161) o6.	(161) Uh.	
DP	258	D	(162) hai6 laa3,	(162) Right,	
DP	258	D	(163) gam2 ngo5 ne1 dou1 tung4 nei5 zou6 maa4 sam1 din6 tou4 tai2 haa2,	(163) let me get you an electrocardiogram,	
DP	258	D	(164) jim6 haa2 di1 hyut3 tong4 go2 di1.gam2 jan1	(164) take a look at your blood sugar and such.	
DP	258	D	(165) wai6 nei5 hyut3 aat3 jau5 di1 gou1,	(165) Because your blood pressure is a bit high,	
DP	258	D	(166) jat1 zan6 loeng4 do1 ci3.	(166) we'll measure it again later.	
DP	258	D	(167) nei5 fong3 sung1 di1 bei2 ngo5 dei6 loeng4 haa2.	(167) Relax for us to measure it.	
DP	258	D	(168) gam2 ngo5 gok3 dak1 wan4 go2 dou6 ngo5 zau6 m4 hai6 tai3 daam1 sam1 ge3,	(168) Well I think when it comes to your dizziness, I'm not that worried,	
DP	258	D	(169) jan1 wai6 go2 di1 ho2 ji5 sik6 joek6.	(169) because there are meds for that.	
TN	258	D	(170) nei5 waa6 gun1 caat3, jan1 wai6 zaam6 si4 nei5 jau6 mou5 mat1 daai6 beng6 zing1,	(170) As for observation, you don't have any serious symptoms,	<ul style="list-style-type: none"> • Proposal exchange: OFFER ^ ACCEPTANCE / REJECTION (msg 172 and msg 175 – 176) • Event orientation habituality: non-habitual irrealis: projected (i.e. concerning what might be/ can be choose, rather than what it is) spatial proximity: distal
TN	258	D	(171) bat1 gwo3 jyu4 gwo2 nei5 waa6 zan1 hai6 wan4 dak1 hou2 sai1 lei6 ne1,	(171) though if you feel really dizzy,	
TN	258	D	(172) nei5 soeng2 m4 soeng2 ngo5 bei2 nap1 zi2 wan4 joek6 nei5 si3 haa2 aa3?	(172) do you want me to prescribe some anti-fainting pills for you?	
TN	259	P	(173) ==zik1 hai6...	(173) ==That means...	
TN	260	D	(174) ==ji4 gaa1 sik6 lap1 zi2 wan4 joek6.	(174) ==Take an anti-fainting pill right now.	
TN	261	P	(175) hai6 aa1,	(175) Yes	
TN	261	P	(176) jiu3 aa3.ngo5...	(176) , I do. ==I...	
TN	262	D	(177) ==hai6 maa3 !	(177) ==Right!	
TN	263	D	(178) gun1 caat3 haa2,	(178) We will observe you;	
TN	263	D	(179) sik6 nap1 joek6 lo1.	(179) take a pill.	
TN	263	D	(180) ==jan1 wai6 ngo5 geng1 nei5 go2 di1 zi2 wan4 joek6 - jyu4 gwo2 waa6 me1 zeoi2 me2 zo2,	(180) ==Because I'm worried that the dizziness relieving pill – if your mouth twists	
TN	263	D	(181) ngo5 geng1 daa2 zam1 nei5 wui2 bei2 gaau3 koeng4 ge3 faan2 jing3.	(181) I'm worried that you may have stronger reactions to injection.	
TN	263	D	(182) gam2 ngo5 bei2 nap1 e6... dai6 ji6 jat1 zek3	(182) Now I prescribe, ah... another—a type–	

			—dai6 ji6 zek3 gei3 zi2 wan4 joek6 nei5 si3 jat1 si3,	another type of pill for you to try,	
TN	263	D	(183) hau2 fuk6 ge3.	(183) an oral pill .	Research comment: The selection of speech function type reflects the style of negotiation.
TN	264	P	(184) ==hai6 aa3 hai6 aa3.	(184) ==Right–right.	
TN	265	D	(185) gam2 ngo5 zou6 di1 gim2 caa4 sin1.	(185) Now I'll do some checking first.	
DP/PE	265	D	(186) gam2 nei5 wan4 dak1 sai1 lei6 hai6 mai6 aa3?	(186) You feel very dizzy, right? D	Cont' DP Research comments: The insertion of PE here can be regarded as a sub-text, in which its 'dependent context', in Hasan's (1999, p. 252) word, facilitates the necessity in conducting further examination regarding Crystal's dizziness. In other words, it stands in a functional relation with the on-going and subsequent DP phases.
DP/PE	265	D	(187) ji4 gaa1 wan4 m4 wan4 aa1?	(187) or you feel dizzy now?	
DP/PE	266	P	(188) ji4 gaa1 zo6 hai2 dou3	(188) Now I'm sitting down	
DP/PE	266	P	(189) zau6 ==dou1 —dou1 siu2 siu2.	(189) still==a little bit.	
DP/PE	267	D	(190) == nei5 kei5 hai2 dou3	(190) ==Stand up	
DP/PE	267	D	(191) tai2 haa2 jau5 mou5.	(191) and see if there you do.	
DP/PE	268	P	(192) naa4,gam1 ziu1 jat1 hei2 san1 ne1,	(192) Now, when I woke up this morning,	
DP/PE	268	P	(193) gam2 joeng2 ne1 zau6 wan4 laa3.	(193) I felt dizzy like this.	
DP/PE	269	D	(194) o6.	(194) Oh.	
DP/PE	269	D	(195) hang4 loeng5 bou6	(195) Take a few steps	
DP/PE	269	D	(196) tai2 haa2.	(196) and see.	
DP/PE	270	D	(197) ji4 gaa1 jau6 m4 hai6 gam2 caa1 wo3.	(197) It doesn't look that bad.	
DP/PE	271	P	(198) hai6 aa3,	(198) Right,	
DP/PE	271	P	(199) ji4 gaa1	(199) not bad now	
DP	272	D	(200) tai2 maai4 go3 hyut3 aat3 tai2 haa6 dim2 sin1 laa1,hou2 mou5 aa3?	(200) Let's see how things go with the blood pressure, alright?	
DP	272	D	(201) hai6 lo1.	(201) Right.	
DP	272	D	(202) jyu4 gwo2 zan1 hai6 e6...hyut3 aat3 joeng6 joeng6 je5 dou1 okay ge3,	(202) If it's really... [If] things are okay with the blood pressure and everything,	
DP	272	D	(203) mei6 bit1 jiu3 nei5 lau4 dai1 gun1 caat3 ge3.	(203) you may not have to stay for observation.	
DP	273	D	(204) hou2.	(204) Good.	
DP	273	D	(205) gam2 ngo5 dei6 zoi3 tai2 jat1 tai2 laa1 zan6 gaan1, hou2 mou5?	(205) Now we'll take a second look later, okay?	
DP	273	D	(206) hai6 lo1.	(206) Right.	
DP	273	D	(207) zou6 faan1 hyut3 tong4	(207) Let's check the blood sugar	
DP	274	P	(208) daan6 hai6 ngo5 gam1 ciu4 mei6 sik6 gwo3 je5 aa3.	(208) But I haven't eaten anything this morning.	Cont' DP
DP	275	D	(209) o2.	(209) Uh.	
DP	275	D	(210) m4 gan2 jiu3 gaa3 !	(210) Never mind!	
DP	275	D	(211) aan3 di1 sik6 faan1 lo1,hou2 mou5?	(211) Eat something after, okay?	
DP	275	D	(212) hyut3 tong4 wui2 m4 wui2 taai3 dai2 ne1?	(212) Would your blood sugar be too low?	
DP	275	D	(213) ngo5 mou5 sik6 mat6 aa3 ni1 dou6. hou2 mou5?	(213) I don't have any food here, alright?	
DP	275	D	(214) dang2 zan6 laa1.	(214) Wait for a while.	
DP	275	D	(215) zou6 gim2 caa4	(215) For the checks	
DP	275	D	(216) == zyun2 tau4 wan2 faan1 nei5.	(216) ==I'll come for you in a moment.	

DP	276	P	(217) hou2 aa1 hou2 aa1 hou2 aa1.	(217) Right–right–right.	
DP	277	D	(218) ho2 m4 ho2 ji5 bei2 zoeng1 zi2 ngo5 tai2 ne1?	(218) Can I have a look at the sheet?	
DP	277	D	(219) me1 man5 gam2 aa3,	(219) The allergies,	
DP	277	D	(220) ngo5 bong1 nei5 caau1 faan1 dai1 lok6 din6 nou5, hou2 mou5?	(220) I'll enter them into the computer for you, okay?	
DP	278	P	(221) o6,	(221) Ah,	
DP	278	P	(222) hou2 aa3–hou2 aa3–hou2 aa3	(222) okay–okay–okay–okay.	
DP	279	D	(223) zyun2 tau4 waan4 faan1 bei2 nei5 aa1, jat1 zan6 gaan1.	(223) Will give it back to you in a moment, later.	
CT/ ST	280	D	(224) nei5 ji5 cin4 jau5 mou5 gam2 wan4 gwo3 gaa3?	(224) You ever felt dizzy this way?	
CT/ ST	281	P	(225) jau5 aa3!	(225) I did!	
CT/ ST	282	D	(226) dou1 gaan3 m4 zung1 ge3.	(226) On occasion.	
CT/ ST	283	P	(227) hai6 aa3 hai6 aa3.	(227) Right–right.	Research comments: The generic elements exhibit a multi-tasking phenomenon in ED context. As recorded in my observation notes, the emergency doctor was performing blood extraction while enacting what traditionally known as ‘small talk’ in medical context.
CT/ ST	284	D	(228)hou2 aa1,	(228) Okay,	
CT/ ST	284	D	(229) gam2 dang2 zan6 laa1.	(229)Now wait a while.	

Activity Stage II: Final Medical Consultation

Generic element	Turn	S	Cantonese Messages	English Translation	Generalised linguistic features + Researcher comments
I	473	D	(220) Crystal,	(220) Crystal.	Minor speech-functional exchange: [punctuative] message \ minor clause of calling types, preselecting name-based Votive Propositional exchange QUESTION ^ ANSWER QUESTION TYPES : [apprize] question \ wh-interrogative (i.e. msg 222)
I	474	P	(221) o6, hai6 aa3.	(221) Uh, right.	
I	475	D	(222) giu3 me1 meng2?	(222) What's your name?	
I	476	P	(223) Crystal,	(223) Crystal.	
FD	477	D	(224) zou6 zo2 sam1 din6 tou4	(224) You did an electrocardiogram;	
FD	477	D	(225) zing3 soeng4,	(225) it's normal.	
FD	478	P	(226) o6.	(226) Uh.	Propositional exchange STATEMENT ^ ACKNOWLEDGEMENT Assertive tone an outclassification of hedge, interpersonal metaphor, modality and interpersonal particle of tentative type etc.
FD	479	D	(227) hyut3 tong4 tung4 hyut3 sik1 sou3 dou1 zing3 soeng4,	(227) Blood sugar and haemoglobin are normal too.	
FD	497	D	(228) gam2 ho2 nang4 nei5 lai4 dou3 ne1	(228) Perhaps when you got here just now,	
FD	497	D	(229) gan2 zoeng1 di1 waa1 tau4 sin1.	(229) you were a bit anxious	
FD	498	P	(230) ng6,	(230) Mm.	
FD	499	D	(231) gam2 lai4 dou3 go2 hyut3 aat3 heoi3	(231) Now the blood pressure has reached around	

FD	499	D	dou3 jat1 baak3 gau2 sap6 gei2 jau6 (232) bei2 gaau3 gou1 laa1.	190, (232) that's relatively high.	Event orientation habituality: non-habitual irrealis: concurrent spatial proximity: immediate Explanatory (i.e. messages typically entails logical expansion, both <i>implicitly</i> and <i>explicitly</i>)
FD	500	P	(233) m6.	(233) Mm.	
FD	501	D	(234) gam2 nei5 kei4 sat6 ho2 nang4 wan2 zan6, (235) ze1 hai6 ji4 gaa1 mou5 gam2 wan4 nei1,	(234) Well actually, you may be stable now, (235) that means you're not that dizzy now,	
FD	501	D	(236) hyut3 aat3 dou1 zing3 soeng4 faan1,	(236) your blood pressure gets to the normal range,	
FD	501	D	(237) jat1 baak3 sei3 sap6 ng5 haa6, gau2 sap6 cat1	(237) around 145 and 97,	
FD	501	D	(238) zau6 wan2 ding6,	(238) then you're stable.	
TN	501	D	(239) gam2 ngo5 gin3 dou2 nei5 dou1 okay ge3,	(239) I see that you're doing okay	
TN	501	D	(240) hang4 dou2 loeng5 bou6 gam2 joeng2,	(240) and can walk a few steps,	
TN	501	D	(241) ngo5 zau6 m4 hai6 taai3 daam1 sam1,	(241) I'm not that worried.	
TN	501	D	(242) gam2 bat1 jyu4 ngo5 hoi1 ling6 ngoi6 jat1 di1 zi2 wan4 joek6 bei2 nei5 faan1 uk1 kei5 si3 jat1 si3,hou2 mou5 aa3?	(242) How about I prescribe some other meds to relieve dizziness for you to try out at home, okay?	
TN	502	P	(243) daan6 hai6 tau4 sin1,e6... fan3 hai2 zoeng1 cong4	(243) But just now, ah... when I lied on the bed	
TN	502	P	(244) jau6 mong6 dou2 go3 tin1 faa1 baan2	(244) and looked at the ceiling	
TN	502	P	(245) wan4 wan4 dei6 lo1.	(245) I felt a bit dizzy.	
TN	503	D	(246) hai6 lo1,	(246) Right,	
TN	503	D	(247) so2 ji5 jiu3 sik6 joek6 lo1,	(247) that's why you need to take meds.	
TN	503	D	(248) nei5== soeng2 m4 soeng2 sik6 zo2 lap1 joek6 sin1 faan2 uk1 kei5 aa1, ding6 hai6 lyut3 joek6 jat1 zan6 gaan1 sik6 aa3? zi6 gei1,	(248) You==Do you--do you want to take the pill before heading home, or you want to get the meds then take them later, yourself??	
TN	504	P	(249) ==o6,	(249) ==Uh.	
TN	505	P	(250) ji4 gaa1 sik6 lo1,	(250) Take it now.	
PT	506	D	(251) ==daan6 hai6 nei5 sik6 zo2	(251) ==but after taking it	
PT	506	D	(252) gei3 zyu6 jiu3 gaak3 faan1 sei3 ng5 go3 zung1 zi1 hau6 sin1 sik6 faan1--	(252) remember to take the second one after four or five hours	
PT	506	D	(253) zik1 hai6 lyut3 zo2 dai6 ji6 --zik1 hai6 nei5 jat1 zan6 gaan1 heoi3 joek6 fong4 lyut3 joek6,	(253) that means take the second--that means you go to the pharmacy to collect the medications,	
PT	506	D	(254) gam2 gaak3 faan1 ng5 go3 zung1 tau4	(254) then wait after around five hours	
PT	506	D	(255) nei5 sin1 zoi3 sik6 kei4 taal joek6,hou2 mou5?	(255) before taking other meds, okay?	
PT	507	P	(256) ==hai6 aa3 hai6 aa3.	(256) ==Right--right.	
DM	509	D	(257) gam2 jat1 zan6 gaan1 gu1 noeng4 aai3 nei5 meng2,	(257) when the nurse calls you later,	
DM	509	D	(258) gam2 mail faan2 uk1 kei5 lo1, hou2	(258) you can go home, alright?	

			mou5?		
AN	510	P	(259) m4 sai2 lau4 ji1 aa4?	(259) I don't have to stay in hospital?	
AN	511	D	(260) gam2 jau6 m4 sai2,	(260) Now that isn't necessary.	
AN	511	D	(261) nei5 jau6 m4 hai6 waa6 di1 jim4 zung6,	(261) You're not that serious,	
AN	511	D	(262) nei5 siu2 siu2 ji5 sei2 bat1 ping4 hang4 ze1,	(262) you just have a bit of imbalanced ear fluids.	
AN	512	P	(263) o2.	(263) Uh.	
AN	513	D	(264) hai6 laa3,	(264) Right,	
AN	513	D	(265) nei5 sam1 din6 tou4 jau6 zing3 soeng4,	(265) your electrocardiogram is normal,	
AN	513	D	(266) jau6—di1 hyut3 jau6 mou5 je5,	(266) and there's nothing wrong with your blood.	
DC	513	D	(267) gam2 dong1 jin4 laa1,nei5 jyu6 ni1 jat1 loeng5 jat6 dou1 wui2 zung6 jau5 di1 wan4 ge2,	(267) Of course, you can expect to be still a bit dizzy these two days,	
DC	513	D	(268) gam2 jyu4 gwo2 nei5 waa6,	(268) though if you, ah...	
DC	513	D	(269) e6... ngo5 gin3 ji5 nei5 zau6 m4 hou2 waa6 zau2 dak1 taai3 jyun5 laa3,	(269) I suggest you not to walk too far,	
DC	513	D	(270) hang4 dak1—hang4 gaai1 hang4 dak1 taai3 jyun5,	(270) walking—not walking too far.	
DC	513	D	(271) hai2 uk1 kei5 jau1 sik1 haa2,	(271) Stay home and rest up,	
DC	513	D	(272) gam2 ei6 sik6 haa2 joek,	(272) ah, take the meds,	
DC	513	D	(273) gam2 do1 sou3 saam1 loeng5 jat6 maan6 maan2 wui2 hou2 di1 gaat3 laa3,	(273) mostly things will gradually get better in a few days.	
DC	514	P	(274) o6.	(274) Uh.	
DC	515	D	(275) gam2 dong1 jin2,jyu4 gwo2 nei5 gok3 dak1 e6... ngo5 wan4 dak1 hou2 sai1 lei6 wo3,	(275) Now of course, if you feel ah... "I'm really dizzy,	
DC	515	D	(276) ceot1 m4 dou3 gaai1 aa3,	(276) I can't leave home",	
DC	515	D	(277) zik6 cing4 zik1 hai6 hai2 zoeng1 cong4 juk1 m4 dou2 aa3 go2 di1 ne1,g	(277) or you're literally, ah, stuck in bed, can't move and such,	
DC	515	D	(278) am2 nei5 mou5 baan6 faat3 laa3	(278) then there's no way,	
DC	515	D	(279) zau6 jiu3 ce1 gwo3 lai4 lo1,hou2 mou5?	(279) we've got to drive you here, alright?	
DC	515	D	(280)= dou3 si4 ho2 nang4 zan1 hai6 jiu3 lau4 jyun2	(280) ==Then you may really have to be admitted,	
AN	515	D	(281) daan6 hai6 nei5 ji4 gaa1 zong6 taai3 gei2	(281) but now your condition is quite fine,	Propositional exchange STATEMENT ^ ACKNOWLEDGEMENT
AN	515	D	(282) ngo5 m4 si2 nei5 lau4 dai1 laa1, hou2 mou5 aa3?	(282) I don't need you to stay in, okay?	
AN	512	P	(283) =====ng6 ng6,aa3 aa3.	(283) ==Mm, ahh.	
AN	513	D	(284) hou2!	(284) Good!	
DC	513	D	(285) gam2 jat1 zan6 gaan1 bei2 maai4 lap1 joek6 nei5 sik6 sin1.	(285) I'll get you a pill in a moment.	
DC	514	P	(286) e6... ngo5 soeng2 man6 haa2 go2 di1 joek6 jyun4 m4 sai2 jat1 ding6 hai2 ni1 go3	(286) Ah... I'd like to ask, that kind of pills, do I have to get them at the pharmacy here?	

			joek6 fong4 aa1 maa3?			
DC	514	P	(287) zik1 hai6 ceot1 min6 go2 di1?	(287) I mean, how about those out there?		
DC	515	D	(288) hai2 ni1 go3 joek6 fong4 lyut3,	(288) Collect the meds at the pharmacy here,		
DC	515	D	(289) haa6.	(289) right.		
DC	516	P	(290) o6,	(290) Uh		
DC	516	P	(291) == ni1 go3 joek6 fong4 lyut3.	(291) ==get them at the pharmacy here.		
DC	517	D	(292) ==m6,	(292) ==Mm		
DC	517	D	(293) hai6 laa3— hai6 laa3.	(293) ==Mm, right—right.		
DC	517	D	(294) nei5 jat1 zan6 gaan1 man6 jat1 man6 gu1 noeng4,	(294) You ask the nurse later,		
DC	517	D	(295) ni1 go3 ngo5 dou1 m4 hai6 hou2 cing1 co2,	(295) I'm not quite sure about this,		
DC	517	D	(296) hou2 mou5?	(296) alright?		
DC	517	D	(297) o6,	(297) Oh,		
DC	517	D	(298) gam2 sai2 m4 sai2 gaa3 jau1 sik1?	(298) Do you need to take a sick leave?		
DC	518	P	(299) m4 sai2—m4 sai2.	(299) No—no.		
DC	519	D	(300) m4 sai2,	(300) No,		
DC	519	D	(301) gam2 nei5 dang2 jat1 zan6,hou2 mou5?	(301) then you wait for a while, okay?		
DC	520	P	(302) o6,	(302) Uh,		
DC	520	P	(303) hou2—hou2,	(303) okay—okay.		
DC	521	D	(304) bei2 lap1 joek6 nei5 sik6 aa3.	(304) I'll get you a pill.		
Turn 522 to Turn 537 omitted						
I	538	D	(305) Crystal	(305) Crystal		
I	539	P	(306) haa3	(306) Huh.		
						Minor speech-functional exchange: [punctuative] message \ minor clause of calling types, preselecting name-based Votive
DC	540	D	(307) ngo5 tau4 sin1 ne1 tung4 gu1 noeng4 deoi3 gwo3 aa3,	(307) I just checked with the nurse,		
DC	540	D	(308) jan1 wai6 nei5 go2 zek3 zi2 wan4 joek6 ne1 zau6 man5 gam2,	(308) because you're allergic to that anti-fainting pill,		
DC	540	D	(309) zik1 hai6 go2 zek3 ne1,gang2 sai3 go2 di1 ne1 zau6 m4 sik6 dak1.	(309) I mean that pill, what was selected you can't take them.		
DC	541	P	(310) hai6 aa3 hai6 aa3.	(310) Right—right.		
DC	542	D	(311) ==hai6 lo1,	(311) ==Right.		
DC	542	D	(312) gam2 ngo5 dei6 gap1 zing3 sat1 jau5 ge3 zi2 wan4 joek6 zau6 hai6 wui2 sik6 zo2 ling6 nei5 gang2 go2 di1 lei4 ge3.	(312) Now what we have at the A&E is the type that makes you panic.		
DC	542	D	(313) gam2 so2 ji5 ne1,e6... jyu4 gwo2 nei5 waa6 ji4 gaa1 soeng2 sik6 joek6	(313) So, ah if you want to take the pills now;		
DC	542	D	(314) zau6 mei6 bit1 lyut3 dou2,	(314) ... you may not get them		
DC	542	D	(315) gam2 jiu3 nei5 zi6 gei2 heoi3 joek6 fong4	(315) then you have to head to the pharmacy		

Cont' DC

DC	542	D	(316) lyut3 ling6 ngoi6 jat1 zek3 dak6 bit6 di1 ge3 joek6	(316) and get another specific medicine	Same as above
DC	542	D	(317) oi3 lai4 zi2 wan4.	(317) to relieve the dizziness.	
DC	542	D	(318) gam2 nei5 zan6 gaan1 heoi3 joek6 fong4 lyut3 zo2 joek6 nei5 e6...	(318) Now later you go to the pharmacy to get the meds, ah...	
DC	542	D	(319) hai2 joek6 fong4 sik6 zo2	(319) Take the meds at the pharmacy,	
DC	542	D	(320) mei6 zau2 lo1,hou2 mou5?	(320) and you can leave, alright?	
DC	543	P	(321) m6.	(321) Mm.	
DC	544	D	(322) hai6 lo1,	(322) Right,	
DC	544	D	(323) jan1 wai6 jyu4 gwo2 ngo5 ji4 gaa1 bei2 nei5 sik6,	(323) because if I let you take it now,	
DC	544	D	(324) geng1 nei5 gang2 sai3 aa3,	(324) I'm worried that you'll panic.	
DC	544	D	(325) jan1 wai6 ngo5 dei6 mou5 go2 zek3 joek6 aa3,	(325) Because we don't have that medicine,	
DC	544	D	(326) hou2 mou5?	(326) alright?	
DC	544	D	(327) gam2 ngo5 hoi1 zo2 ling6 ngoi6 jat1 zek3 bei2 nei5 ge3,hou2 mou5?	(327) So I prescribed another one for you, is that alright?	
DC	545	P	(328) m6.	(328) Mm.	
DC	546	D	(329) hou2!	(329) Good!	
DC	546	D	(320) gam2 aa3 nei5 jau1 sik1 haa2,	(320) Now you take some rest,	
DC	547	D	(321) gam2 jat1 zan6 gaan1 aai3 nei5.	(321) we'll call you later.	
DC	548	P	(322) aa3,	(322) Ah,	
DC	548	P	(323) hou2 aa3.	(323) good.	
DC	548	P	(324) aa3!!	(324) Hey!	
DC	548	P	(325) gu1 noeng4	(325) Nurse!	
PT	548	P	(326) go2 di1 go2 di1 zi2 wan4 joek6 ho2 ji5 hung1 tou5 sik6,dak1 m4 dak1 gaa3?	(326) That type of dizziness relieving pills, can they be taken on an empty stomach?	
PT	549	D	(327) dou1 dak1.	(327) It works too	
PT	549	D	(328) == bat1 gwo3 nei5 waa6 mou5 sik6 je5,	(328) .==But you said you hadn't eaten anything,	
PT	549	D	(329) pei3 jyu4 nei5 jat1 zan6 gaan1 sik6 di1 je5 sin1 zau2 lo1.	(329) What if you get something to eat before leaving.	
PT	549	D	(330) zi6 gei2 heoi3 fu6 gan6 maa5 di1 je5 sik6 sin1 lo1.	(330) Go to some eateries nearby to grab a bite.	
PT	550	P	(331) ==aa3 hai6 aa3 jat1 hai6	(331) ==Ah, right, how about	
PT	551	D	(332) nei5 mou5 sik6 je5 ==zau1 wai4 hang4 dou1 wui6 wan4 gaat1 maa3,hai6 mai5?	(332) With an empty stomach==walking around, you will feel dizzy, right?	
PT	552	P	(333) aa3,hou2 aa3.	(333) Ah, okay.	
PT	553	D	(334) hai6 lo1.	(334) Right.	

APPENDIX II

SUMMARY OF CANTONESE SEMANTIC NETWORKS

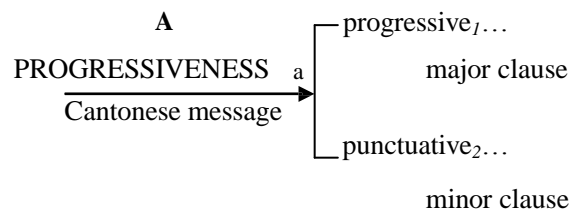


Figure 1. Primary options of PROGRESSIVENESS in Cantonese message semantics (Fragment A)

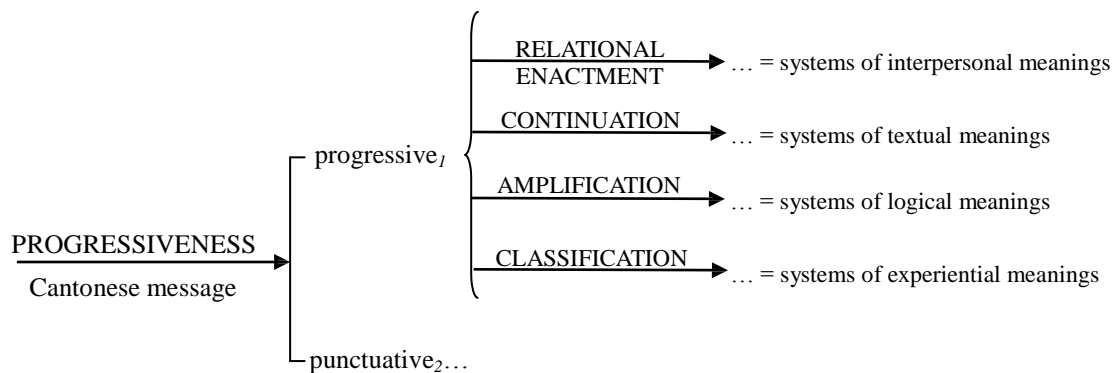


Figure 2. The overall organisation of Cantonese message semantics

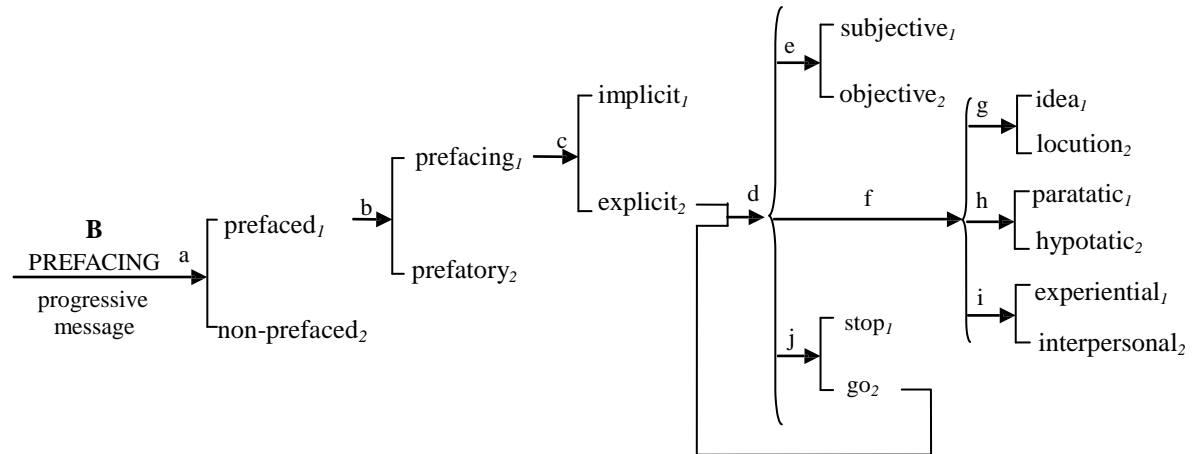


Figure 3. A simplified semantic network of PREFACING in Cantonese (Fragment B)

Table 1. Tentative lexicogrammatical realisations of meaning options of PREFACING (Fragment B)

SEMANTIC OPTION	CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1: [prefaced]	see b1 and b2
a2: [non-prefaced]	outclassify b1 and b2
b1: [prefacing]	prefacing element preselects major process
b2: [prefatory]	prefacing element preselects minor process
c1: [implicit]	prefacing element preselects the ‘hearsay’ clause final particle <i>wo5</i>
c2: [explicit]	preselect projecting clause as prefacing element
e1 [subjective]	1) insert element Subject; 2) S conflates with Sayer or Sensor; 3) S in projecting clause preselect (an instance of) personal pronouns or kin term or term of endearment
e2 [objective]	1) insert element Subject; 2) S conflates with Sayer or Sensor; 3) Either: a) S preselects indefinite pronoun or lexical word <i>jan4dei6</i> or b) S is left implicit
g1: [idea]	Process in the projecting clause preselects Mental
g2: [locution]	Process in the projecting clause preselects Verbal
h1: [paratatic]	clause complex preselects paratactic projection
h2: [hypotatic]	clause complex preselects hypotatic projection
i1 [experiential]	projecting clause outclassifies as interpersonal grammatical metaphor
i2 [interpersonal]	projecting clause preselects as interpersonal grammatical metaphor

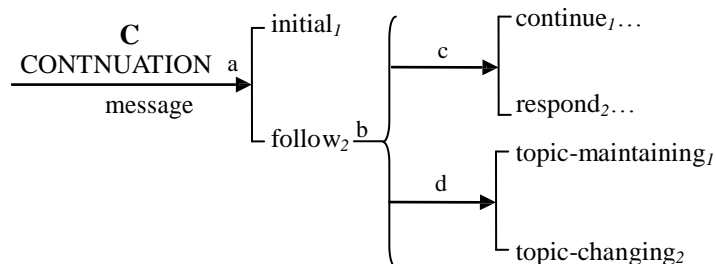


Figure 4. A tentative semantic network of CONTINUATION in Cantonese (Fragment C)

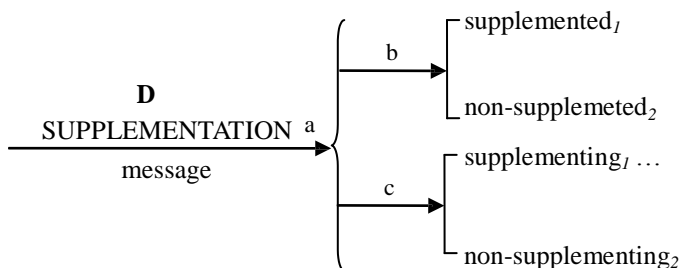


Figure 5. A tentative network of SUPPLEMENTATION in Cantonese message semantics (Fragment D)

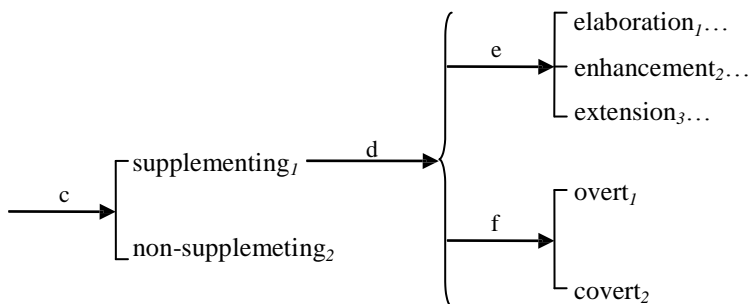


Figure 6. A tentative network of [supplementing] in Cantonese message semantics

Table 2 Tentative lexicogrammatical realisations of meaning options of SUPPLEMENTATION (Fragment D)

SEMANTIC OPTION		CANTONESE LEXICOGRAMMATICAL REALISATIONS
-----------------	--	------------------------------------------

- | | | |
|----|--------------------|-----------------------------------------------------|
| b1 | [supplemented] | clause under focused is expanded by another clauses |
| b2 | [non-supplemented] | clause under focused outclassifies expansion |

c1	[supplementing]	clause under focused is expanding another clauses
c2	[non-supplementing]	clause under focused outclassifies expansion
d1	[elaboration]	preselecting elaborating relations
d2	[enhancement]	preselecting enhancing relations
d3	[extension]	preselecting extending relations
e1	[overt]	preselecting conjunction in clausal expansion
e2	[covert]	outclassifying conjunction in clausal expansion

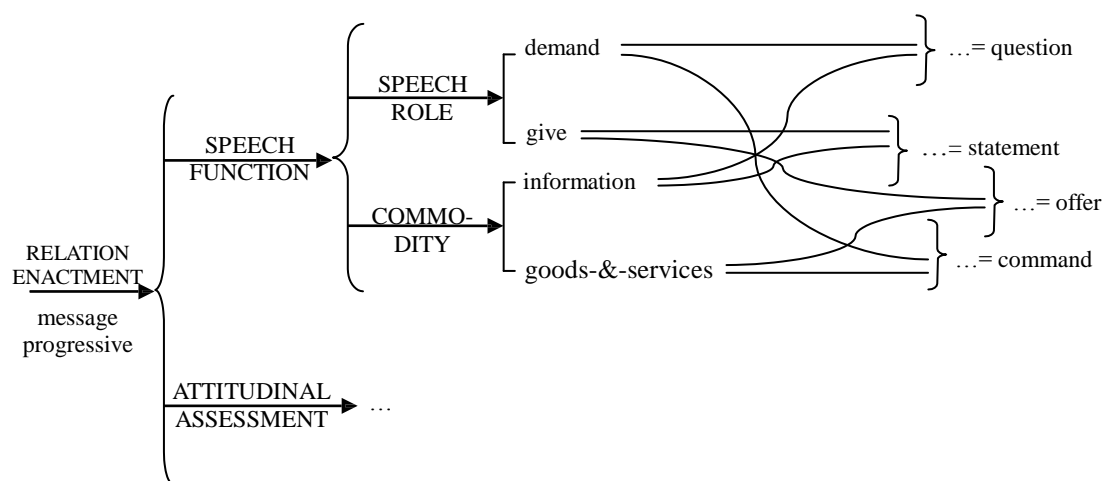


Figure 7 A tentative semantic network of RELATION ENACTMENT in Cantonese

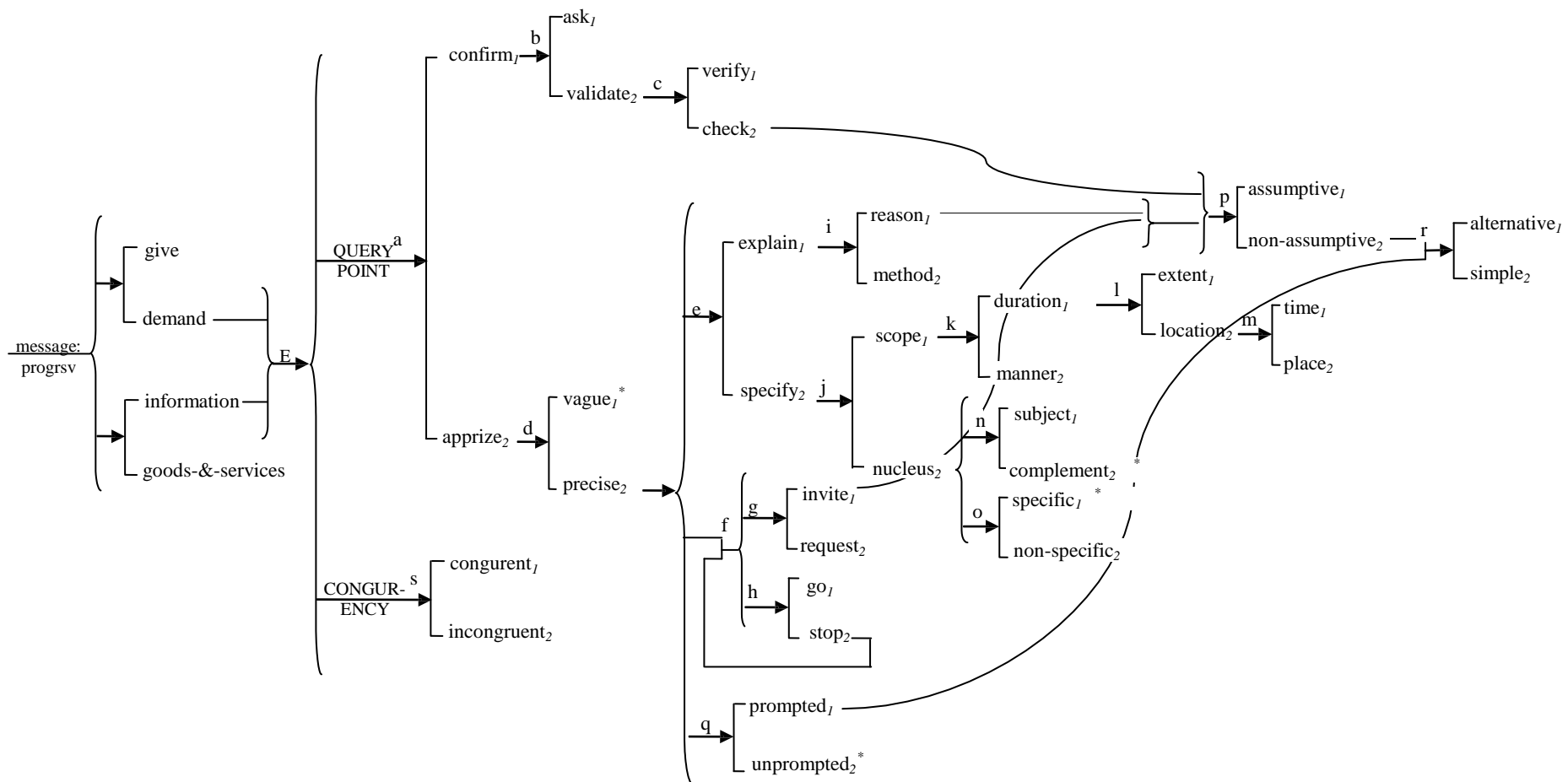


Figure 8 A tentative system network of semantic choices in demanding information in Cantonese (Fragment E)

Table 3. Tentative lexicogrammatical realisations of meaning options of QUESTION (Fragment E)

SEMANTIC OPTION		CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1	[confirm]	(i) major: indicative (ii) query point conflates with polarity
a2	[apprize]	(i) major: indicative (ii) query point conflates with element other than polarity
PART A: semantic option of asking yes-no-question		
		Type 1 (i) insert interrogative marker (ii) preselect <i>A-not-A</i> interrogative marker, (iii) <i>A</i> conflates with Predicate
b1	[ask]	Type 2 (i) insert question/interrogative particle (ii) preselect <i>maa3</i> (iii) <i>P ^ maa3 ^ #</i>
		Type 3 (i) insert negator (ii) preselect <i>mei6</i> (iii) <i>P ^ negator ^ #</i>
b2	[validate]	as c1 and c2
c1	[verify]	(i) insert mood tag (ii) preselect particles <i>ho2</i> and <i>ha2</i> OR question tags such as, <i>hai5-maa3</i> and <i>hai5-mai2</i>
c2:o1	[check: assumptive]	Type 1 (i) insert segmental assumptive particle (ii) preselect <i>me1</i> , <i>aa4</i> or <i>gaa4</i> (iii) <i>P ^ particle ^ #</i>
		Type 2 (i) insert non-segmental assumptive particle (ii) declarative + final rising tone ^ #
c2:o2	[check: nonassumptive]	Type 1 (i) insert lexical phrase (ii) select <i>zik1 hai6</i> (iii) <i># ^ zik1 hai6 ^ P</i>
		Type 2 (i) insert clause final particle

- (ii) preselect *le3*
- (iii) P ^ particle ^ #

PART B: semantic options of asking content question

d1	[vague]	<ul style="list-style-type: none"> (i) major: indicative: declarative (ii) insert element Mood (iii) expand Mood as Subject ^ Predicate (iv) Predicate conflates with Relational Process e.g. <i>hai2</i> (v) outclassifies wh-interrogative marker and mood particle
e2	[precise]	<ul style="list-style-type: none"> (i) major: indicative (ii) insert element Mood
g1	[invite]	<ul style="list-style-type: none"> (i) expand Mood as wh-interrogative (ii) insert open-interrogative marker OR mood particle
g2	[request]	<ul style="list-style-type: none"> (i) expand Mood as imperative #(S) ^ P

PART B1: semantic options of asking [congruent] content question (i.e. QUESTION wh-interrogative)

B1a: Options pertaining to *explanation-type* questions

e1; g1	[invite; explain]	see i1:p1 and i1:p2
		<p>Type 1</p> <ul style="list-style-type: none"> (i) insert adverb and open-interrogative/wh-marker (ii) adverb preselects <i>mat1</i>; open-interrogative marker preselects <i>dim2 gai2</i> (iii) <i>mat1</i> ^ <i>dim2 gai2</i> ^ P ^ #
i1:p1	[reason: assumptive]	<p>Type 2</p> <ul style="list-style-type: none"> (i) insert adverb and clause final particle (ii) adverb preselects <i>mat1</i>; clause final particle preselects <i>ge3</i> (iii) <i>mat1</i> ^ P ^ <i>ge3</i> ^ # <p>Type 3</p> <p>combination of (1) and (2) as discontinuous structure</p>
i1:p2	[reason: non-assumptive]	<p>Type 1</p> <ul style="list-style-type: none"> (i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>dim2 gai2, wai3 mat1, jan1 mat1 si6, zou6 mat1 etc</i> (iii) conflate with Adjunct <p>Type 2</p> <ul style="list-style-type: none"> (i) insert clause final particle (ii) preselect <i>ge2</i> (iii) P ^ particle ^ #

combination of (1) and (2) as discontinuous structure

i2	[method]	(ii) preselect wh-marker e.g. <i>dim2</i> , <i>dim2 joeng6 + verb</i> (iii) conflate with Adjunct
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B1a: Options pertaining to *specification-type* questions

e2; g1	[invite; specify]	see j1 and j2
j1	[scope]	as in k1 and k2
k1	[duration]	as in l1 and l2
k2	[manner]	(i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>dim2</i> , <i>dim2 joeng6</i> (iii) conflate with Adjunct
l1	[extent]	(i) insert open-interrogative/wh-marker (ii) preselect wh-marker <i>gei2</i> + <i>adj./adv</i> , <i>gei2 dohl</i> + <i>thing etc</i> (iii) conflate with Adjunct
l2	[location]	as in m1 and m2
m1	[time]	(i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>gei2 dim2</i> , <i>gei2 si4</i> (iii) conflate with Adjunct
m2	[place]	(i) insert open-interrogative/wh-marker (ii) preselect wh-marker e.g. <i>bin1 do5</i> , <i>bin1 syu2</i> (iii) conflate with Adjunct
j2	[nucleus]	(i) insert open-interrogative/wh-marker
n1	[subject]	open-interrogative/wh-marker conflates with Subject
n2	[complement]	open-interrogative/wh-marker conflates with Complement
o1	[specific]	preselect wh-marker e.g. <i>bin1 yat1</i> / <i>bin1 di1</i> + <i>Thing</i>
o2	[non-specific]	preselect wh-marker e.g. <i>bin1 go3</i> , <i>mat je5</i>

PART B2: semantic options of asking [incongruent] content question (i.e. QUESTION imperative)

B2a: Options pertaining to *explanation-type* questions

e1; g2	[request; explain]	(i) major: indicative : imperative
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		(ii) insert Predicate
		(iii) Predicate conflates with Verbal Process e.g. <i>gong2, wa6</i>
		(iv) enquiry point re-constructed as through ideational metaphor, preselecting lexical phrase of <i>explanation-type</i> as Complement
i1	[reason]	Complement realised lexically as <i>jun4 jan1</i>
i2	[method]	Complement realised lexically as <i>fong1 faat3, baan6 faat3</i>

B2b: Options pertaining to *specification-type* questions

e1; g2	[request; specify]	(i) major: indicative : imperative (ii) insert Predicate (iii) Predicate conflates with Verbal Process e.g. <i>gong2, wa6</i> (iv) enquiry point re-constructed as through ideational metaphor, preselecting lexical phrase of <i>explain-type</i> as Complement
j1	[scope]	see k1 and k2
k1	[duration]	as in l1 and l2
l1	[extent]	Complement realised lexically as <i>cing4 dou6</i>
l2	[location]	as in m1 and m2
m1	[time]	Complement realised lexically as <i>si4 gaan1</i>
m2	[place]	Complement realised lexically as <i>dei6 fong1</i>

PART C: semantic options pertaining to PROMPTING and ASSUMPTIVENESS

q1	[prompted]	preselect question prompt
q2	[unprompted]	outclassify question prompt
r1	[alternative]	preselect EITEHR (iii) explicit coordinating conjunction <i>jik1 waak6</i> or <i>ding6 hai6</i> (iv) implicit coordinating conjunction
r2	[simple]	outclassify both explicit and implicit coordinating conjunction
s1	[congruent]	Realising clause preselects [<i>interrogative</i>] clause
s2	[incongruent]	Realising clause outclassifies [<i>interrogative</i>] clause

Note:

- (4) The selection expression [**vague: complement: specific: unprompted**] constitutes the defaulted dependency.
- (5) A non-recursive specification question through COMMAND select [**request; specify: complement: specific**] as default dependency.
- (6) If the meaning options [**request; specify: scope**] are selected, it appears that the option under system k must select [**duration**] as default dependency.

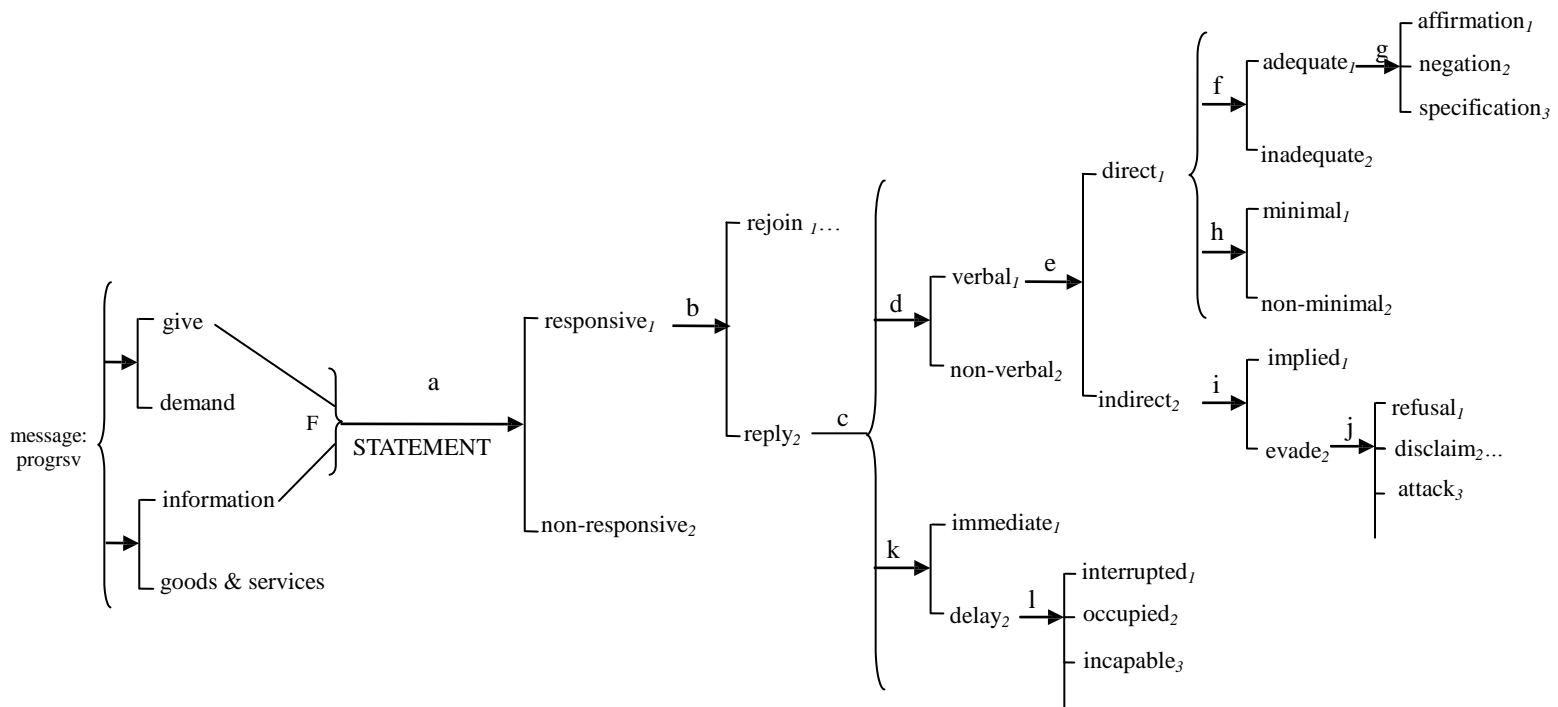


Figure 9. A tentative semantic network in giving statement in Cantonese (Fragment F) (modified from Hasan, 1968)

Table 4 Tentative lexicogrammatical realisations of meaning options of ANSWER (Fragment F)

SEMANTIC OPTION		CANTONESE LEXICOGRAMMATICAL REALISATIONS
a1	[responsive]	3) major: indicative: declarative 4) relate to the clause in the previous turn cohesively
a2	[non-responsive]	3) major: indicative: declarative 4) DO NOT relate to the clause in the previous turn cohesively
b1	[rejoin]	clause in the previous turn functions as speech function STATEMENT or COMMAND
b2	[reply]	clause in the previous turn functions as speech function QUESTION
d1	[verbal]	the mode of representation/channel of the clause preselects verbal
d2	[non-verbal]	the mode of representation/channel of the clause outclassifies verbal
e1	[direct]	the answer point of the declarative clause relates to the query point of the clause in the previous turn cohesively
e2	[indirect]	the answer point of the declarative clause DO NOT relate to the query point of the clause in the previous turn cohesively
f1	[adequate]	declarative clause relates to the query point of the clause in the previous turn both GRAMMATICALLY and LEXICALLY
f2	[inadequate]	declarative clause relates to the query point of the clause in the previous turn GRAMMATICALLY
g1	[affirmation]	the answer point of the declarative clause preselects positive polarity
g2	[negation]	the answer point of the declarative clause preselects negative polarity
g3	[specification]	the answer point of the declarative clause preselects wh-expressions
h1	[minimal]	declarative clause outclassifies clausal expansion
h2	[non-minimal]	declarative clause preselects clausal expansion
i1	[implied]	no specific realisation
i2	[evade]	polarity of the declarative clause preselects negative
j1	[refusal]	Process type of the declarative clause preselects verbal such as <i>wui4 daap3</i> (reply), <i>gong2</i> (say) etc.
j2	[disclaim]	Process type of the declarative clause preselects mental such as <i>zi1 dou6, sik1</i> (know) or <i>gei3 dak1</i> (remember) etc.
j3	[attack]	preselects modality/appraisal
k1	[immediate]	clause functioning as reply follows immediately the preceding QUESTION
k2	[delay]	clause functioning as reply DO NOT follow immediately the preceding QUESTION
l1	[interrupted]	3) clause functioning as reply follows the verbal interruption 4) QUESTION ^ interruption ^ ANSWER

12	[occupied]	QUESTION ⁿ ^ ANSWER
13	[incapable]	no specific realisation

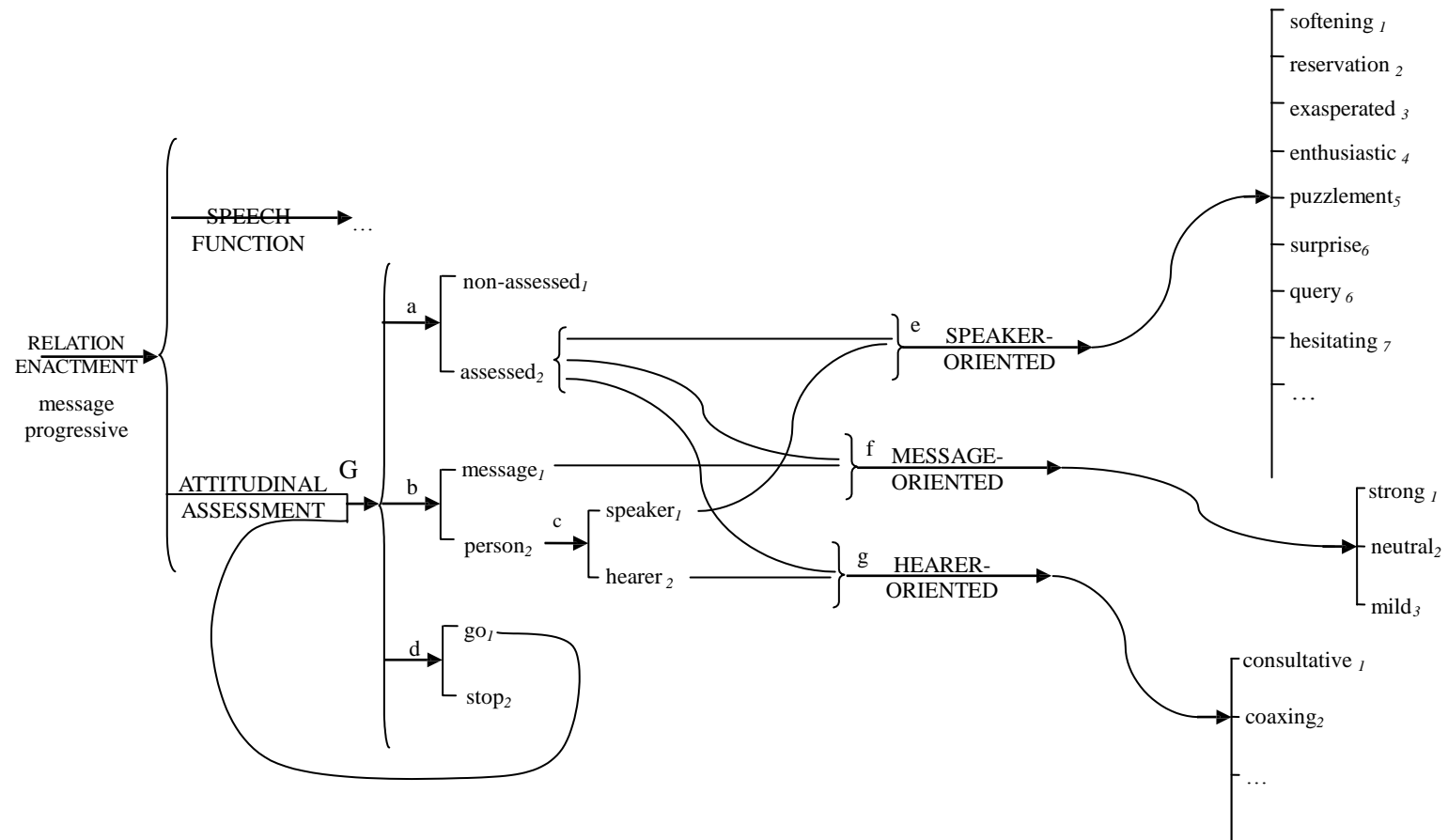


Figure 10. A tentative semantic network of ATTITUDINAL ASSESSMENT in Cantonese (Fragment G)

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