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The Use of Communication Strategies by Learners of English and Learners of Chinese in Text-based and Video-based Synchronous Computer-mediated Communication (SCMC)

Hung, Yu-Wan

Abstract

The use of communication strategies (CSs) has been of interest on research into second language acquisition (SLA) since it can help learners to attain mutual comprehension effectively and develops understanding of interaction in SLA research. This study investigates and clarifies a wide range of CSs that learners of English and learners of Chinese use to solve language problems as well as to facilitate problem-free discourse in both text-based and video-based SCMC environments.

Seven Chinese-speaking learners of English and seven English-speaking learners of Chinese were paired up as tandem (reciprocal) learning dyads in this study. Each dyad participated in four interactions, namely, text-based SCMC in English, text-based SCMC in Chinese, video-based SCMC in English and video-based SCMC in Chinese. The interaction data were analysed along with an after-task questionnaire and stimulated reflection to explore systematically and comprehensively the differences between text-based and video-based SCMC and differences between learners of English and learners of Chinese.

The results showed that learners used CSs differently in text-based and video-based SCMC compared with their own performance and indicated different learning opportunities provided by these two modes of SCMC. Although the difference in language was less salient than the medium effect, learners of English and learners of Chinese tended to have their own preferences for particular CSs.

When these preferences appear to reflect an appropriate communicative style in one particular culture, learners might need to raise their awareness of some strategies during intercultural communication to avoid possible misunderstanding or offence. Some possible advantages of tandem learning interaction were also identified in this study, such as the potential to develop sociocultural and intercultural competence due to the opportunity to practice culturally appropriate language use with native speakers in a social context.

**The Use of Communication Strategies by Learners of English and Learners of
Chinese in Text-based and Video-based Synchronous Computer-mediated
Communication (SCMC)**

Hung, Yu-Wan

A Thesis Submitted for the Degree of
Doctor of Philosophy
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Dedicated to my parents

獻給我的父母

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The proliferation of internet use in recent years has promoted computer mediated communication (CMC) as a widespread medium of communication that language learners encounter inside and outside the educational setting. CMC refers to communication occurring between human beings through the instrumentality of computers (Herring, 1996), which then falls into two categories of synchronous and asynchronous CMC. Synchronous CMC requires all interlocutors to be on line at the same time and to expect an immediate response from one another, while asynchronous CMC does not require interlocutors to be on line at the same time and thus generally expect delayed responses. As a related newcomer in the field of second language acquisition (SLA), CMC, particularly in synchronous mode, has not been investigated comprehensively. Therefore, this study focuses on synchronous CMC.

As synchronous CMC has become an important medium of communication in contemporary culture, the effective use of the target language¹ to achieve successful communication in this contemporary medium becomes one practical goal for many language learners. The ability to use language in interaction does not only involve language competence but also strategic competence (Bachman, 1990; Bachman & Palmer, 1996), which is particularly important for language learners since it involves “the ability to communicate within restrictions” (Savignon, 1997,

¹ The target language refers to the language learned as either the second language (for example, the learning of English by speakers of other languages in the United Kingdom) or the foreign language (for example, the learning of English in Taiwan). It is noted that some researchers distinguish second language acquisition from foreign language acquisition. Nevertheless, as this study does not intend to compare and contrast the similarities or differences between second language and foreign language learning, second language acquisition in this study refers to both areas.

p47). Apart from the communicative goal, the real time conversational interaction in a CMC environment also offers the potential for language acquisition. From an interactionist perspective, conversation is indeed where language learning takes place (Gass, 2003) and acquisition is facilitated by meaning negotiations, particularly those which trigger interactional modifications by more competent interlocutors (Long, 1981, 1983, 1996). Interactional modifications serve to either repair or prevent communication problems and thereby fall into the category of communication strategies (CSs). As the use of communication strategies appears to be important for language learners to use and acquire the target language in synchronous CMC, this study focuses on synchronous CMC and specifically investigates the use of communication strategies by language learners.

Earlier studies in synchronous CMC often refer to synchronous text-based CMC only, which might be because the technology of synchronous video-based CMC has only become reliable and popular in recent years. Reflecting the widespread use of synchronous CMC nowadays, synchronous CMC in this study include synchronous text-based CMC as well as synchronous video-based CMC. Despite the affordance of worldwide communication in a real time, these two modes of synchronous CMC appear to enable different interactive environments. Synchronous text-based CMC is a hybrid of written and spoken discourses since it integrates features of written discourse (such as the use of textual formatting) with spoken discourse (such as the clear informality) and it also carries unique features of CMC (such as the lack of turn adjacency and the acceptance of surface errors; Murray, 2000; Smith, 2003a, 2003b). On the other hand, synchronous video-based CMC (also known as video conferencing) is more like face to face communication in terms of the availability of visual cues (such as gestures) as well as vocal cues (such as intonation), although the medium is not as rich as face to face communication in

terms of Media Richness Theory since interlocutors can only get partial visual cues (Daft & Lengel, 1986; Setlock, Quinones, Fussell, 2007) due to the restrictions of technology. As the distinction between synchronous text-based and video-based CMC is relevant to anyone who wants to utilize the media for language teaching and learning, this study attempts to account for the differences between the two modes of SCMC in terms of communication strategy use by learners.

Tarone (1980) argued that strategic competence seems to have some universal aspects in use of all languages, which agrees with Bachman (1990) who separated strategic competence entirely from language competence and defined strategic competence as a mental ability to implement the components of language competence in communicative language use. Nevertheless, as text-based interaction is carried in the written form, the use of some communication strategies in text-based chat may be affected in languages from different writing systems. While Smith (2003b) found abbreviation was the strategy used frequently by learners of English in synchronous text-based interaction and suggested its use might be promoted by written discourse to either economize typing effort or to avoid errors, it is important to bear in mind that his study focused on learning English which is an alphabetic language, with no requirement to generate a strategy to deal with ideographic languages such as Chinese (referring to Mandarin Chinese in this study). In addition, Kitade (2000) suggested that text-based CMC could enhance noticing of phonological errors (such as voiced/unvoiced) in languages that have great correspondence between spelling and pronunciation, but the effect is uncertain in ideographic languages such as Chinese. As the noticing often triggers the use of communication strategies such as self-correction or interactional modification strategies, the use of these strategies may be affected by the communication medium as well as the conversational language. English and Chinese represent two different

writing systems and more importantly they are two popular target languages nowadays. This study also investigates if learners of these two target languages use communication strategies differently in synchronous CMC. Indeed, despite some universal aspects, Tarone did not counter that the preference for particular types of communication strategy use may be related to specific languages or cultures. She defined communication strategies as “mutual attempts of two interlocutors to agree on meaning in situations where the requisite meaning structures do not seem to be shared” (1980, p 420) and pointed out that meaning structures include both linguistic and sociolinguistic structures. That is, some language or culture specific aspects of appropriateness are involved (Canale, 1983). The investigation into communication strategy use by both learners of English and learners of Chinese in this study may also help understand the language and culturally specific aspects of communication strategy use in synchronous CMC.

1.2 Purpose of the Study

The purpose of this study is twofold: first, to construct communication strategy coding categories specifically for synchronous CMC by identifying a wide range of communication strategies from previous studies and second, to employ the coding categories in the investigation of communication strategies used by learners of English and learners of Chinese in both text-based and video-based synchronous CMC environments where they are interacting with each other as tandem learning dyads.

The taxonomy of communication strategies is often approached from either an interactional or a psycholinguistic perspective due to the divergence of research aims and analytic methods (Yule & Tarone, 1997). This study intends to investigate how learners achieve mutual comprehension and have effective communication with

others in synchronous CMC within an interactional framework, however the majority of communication strategy taxonomies proposed in the previous studies were actually for face to face communication. Although most proposed communication strategies can probably be used in synchronous CMC as well due to the shared features on communication, there are likely to be some communication strategies that can not be employed or may need to be adjusted in synchronous CMC due to the differences or affordances of the medium. Indeed, some studies (e.g. Negretti, 1999; Peterson, 2006; Simpson, 2002) have observed a number of exclusive communication strategies for text-based CMC. As synchronous text-based and video-based CMC appear to enable different interactive environments, communication strategy coding categories specifically for synchronous CMC within the interactional framework may need to distinguish between text-based and video-based modes.

Social interaction, especially with a native speaker or more competent interlocutor, is widely acknowledged to be beneficial for second language acquisition, although its functions are viewed differently from different theoretical perspectives. Long (1981, 1983) proposed the interaction hypothesis that participation in conversation with native speakers can facilitate second language acquisition at the point that native speakers can make input comprehensible for learners through interactional modifications without compensation for complexity. He later updated the hypothesis by taking into account negative feedback and learners' output and suggested that meaning negotiation, especially with a native speaker or more competent interlocutor, facilitates second language acquisition by connecting input, internal learner capacities, and output through selective attention (Long, 1996). In the process of meaning negotiations, learners and their interlocutors make input comprehensible for each other through interactional modifications. As interactional

modifications, including discourse management and discourse repair, aim to achieve mutual agreement on situated meaning, they are considered as types of communication strategies (e.g. Dörnyei & Scott, 1997; Lee, 2002b; Long, 1983; Smith, 2003b). Despite the potential for target language acquisition, the primary goal of communication strategies is indeed to negotiate meaning and also to communicate or interact with interlocutors effectively (Tarone, 1980). From this aspect, communication strategies should not be restricted to interactional modifications or problem-solving strategies. Indeed, as this study intends to have a relatively complete picture of communication strategy use by learners in the two modes of synchronous CMC and also in the two target languages, the scope of communication strategies in this study is extended to cover a wide range of communication-enhancing tactics used during either problem or problem-free discourse (Dörnyei, 1995; Smith, 2003b). All strategies recognized in this study are further sorted into groups in terms of the functions to facilitate the investigation. Moreover, the coding and classification of each strategy is carefully clarified, based on the previous literature as well as the empirical examples excerpted from the pilot study to ensure the validity and the applicability in synchronous CMC environment.

In employing the communication strategy coding categories for synchronous CMC, this study also aims to investigate how language learners use communication strategies in synchronous CMC with two variables: the mode of synchronous CMC (text-based or video-based) and the language used in conversation (English or Chinese). The use of communication strategies by learners are investigated in four types of interaction respectively, which are (1) synchronous text-based interaction in English, (2) synchronous text-based interaction in Chinese, (3) synchronous video-based interaction in English, and (4) synchronous video-based interaction in Chinese. The attempt is not only to shed light on what

communication strategies language learners use to facilitate conversational interaction in synchronous CMC but also to understand the different interactive environments constructed by text-based and video-based synchronous CMC through the impact on communication strategy use. Moreover, this study includes learners of Chinese in addition to learners of English to find out if the two groups of learners have different preferences for particular communication strategies and may also know to what extent the dominant research in English language learning can be adapted to Chinese language learning.

As the development of sociocultural competence is as important as language competence for learners to have effective social interaction (Canale, 1983), learning in a social context is highly recommended, if not essential. While social interaction with native speakers in a real world setting offers learners rich authentic language along with a wide range of discourse functions that are often limited in the classroom, the interaction appears to be affected by the social setting in terms of the input provided by the native speakers as well as the way learners negotiate the meaning and notice target language forms (Tarone, 2008, 2010). In the same vein, Lafford (2004) found that learners tended to be discouraged from using certain types of communication strategies such as the strategies to pursue accurate forms of the target language when interacting with native speakers outside the learning setting. From this aspect, learners may benefit from the tandem learning interaction to extend their learning outside the classroom as it appears to be one way to allow learners to have social interaction with a native speaker in a real world setting yet within the constraints of a learning context and the experience may also prepare learners for different types of interaction. Therefore, while this study intends to investigate how learners of English and learners of Chinese use communication strategies to facilitate their target language conversation in both synchronous text-based and video-based

CMC environments, tandem learning dyads were purposely designed in the hope to make some contribution to the area of tandem learning. To meet the research aims, Chinese-speaking learners of English and English-speaking learners of Chinese were recruited and paired as tandem (reciprocal) learning dyads to communicate with each other in their native and target languages in the two modes of synchronous CMC respectively. That is, each dyad participated in all the four interactions as just mentioned above. A clear distinction between interaction in Chinese and in English was made by requesting participants to communicate in one target language only for each interaction according to the designed participating pattern in order to have a clear view of how learners of English and learners of Chinese use communication strategies in the target language. In addition, as the availability of free synchronous CMC applications appears to provide a low cost and easy access to have international tandem learning interaction, two popular free applications, MSN Messenger and Skype, are selected in this study to demonstrate the possibilities in this regard and also to represent text-based and video-based synchronous CMC environments in general.

1.3 An Overview of Synchronous Computer Mediated Communication

Synchronous computer mediated communication (SCMC) has been increasingly put into pedagogical use in second/foreign language teaching and learning to date. Earlier researchers have found advantages for SCMC as opposed to face to face communication such as increased equal participation (e.g. Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1996) as well as increased language production and complexity (e.g. Chun, 1994; Kern, 1995; Warschauer, 1996), and reduced anxiety caused by time or psychological pressure (e.g. Chun, 1994; Kelm, 1992; Kern, 1995). It is noted that the above studies were all investigated through

online text-based discussion. While synchronous text-based interaction is suggested to promote language proficiency due to the interactional structures that resembles face to face communication, synchronous video-based interaction seems to be more powerful in this regard. Nevertheless, it is also possible that the strong similarity might at the same time take away the advantages just mentioned. Kinginger (1998) conducted a study to investigate a classroom interaction between two language classes through interactional video-conferencing and found anxiety was induced by the stress of public speaking in networked environment, where the audiences were from the local class as well as the remote class. In addition to the psychological stress, the reduced time pressure in text-based interaction might also rebound in video-based interaction. Although the characteristics in video-based interaction are definitely different from text-based interaction, there are not so many studies investigating its characteristics, which might because of an unproven presumption of very limited difference from face to face communication and the high cost of using this technology (Kinger reported the total cost of the hour-long event was approximately \$332 in his study). Nevertheless, as both text-based and video-based SCMC have become parts of the worldwide media of communication nowadays, it is important for learners to get acquainted with both modes of SCMC. More importantly, as both modes of SCMC provide access for learners to interact socially with native speakers or other learners in the target language without constraint in terms of the same location, they both offer more opportunities to practise the target language in addition to traditional classroom activities. Indeed, recent implications of SCMC are not only for pedagogical use of language teaching in one single classroom but more often for collaborative language learning at a distant. Accordingly, one recent research interest of SCMC is in how learners use the target language effectively with others in SCMC.

In order to understand the potential of the SCMC environment for target language acquisition, recent studies in SCMC attempted to be grounded in foundations of sound second language acquisition theories and particularly in theories of interaction. Studies grounded in Long's interaction hypothesis (1996) or sociocultural theory focused on how learners engaged in negotiated interaction to attain mutual comprehension through interactional modifications (e.g. Fernández-García & Martínez-Arbelaiz, 2002; Lee, 2001, 2002b; Smith, 2003a, 2004). According to Long's interaction hypothesis, language acquisition is considered as cognitive development and social interaction that fosters meaning negotiations serves to trigger cognitive processes involved in language acquisition. In the process, interactional modifications are to make noticed input comprehensible for learners in order to convert into intake as well as to make learners' output comprehensible for their interlocutors in response to negative input (feedback on learners' incorrect output). When learners modify their output, they are engaged in cognitive processing to analyze and grammaticize the target language and might thereby generalize new language knowledge or consolidate exiting language knowledge (Swain & Lapkin, 1995). Whereas the interaction hypothesis focuses on one particular type of interaction that is negotiated interaction and the linguistic environment provided by negotiated interaction, there are increasing numbers of studies grounded in sociocultural theory, another theory from an interactionist perspective, since it provides a broader account of the role of interaction in second language acquisition. From a sociocultural perspective, language serves as a mediator for individuals to be connected with outside, the sociocultural environment, and social interaction in general is beneficial for second language learning, particularly the social aspect of language acquisition. Studies (e.g. Kitade, 2000; Lee, 2004, 2008; Peterson, 2009) have found collaborative

interaction in SCMC could provide a positive condition for second language acquisition. Darhower (2002) also found the positive effect of social interaction in SCMC on the development of sociolinguistic competence in a sociocultural framework.

Generally, Long's interaction hypothesis is more cognitive in orientation and sociocultural theory is more social in orientation. Nevertheless, Ellis (1999) suggested identifying them as a general interactionist perspective at the point that interaction plays a major part in creating the conditions for second language acquisition. Indeed, a socio-cognitive perspective on language acquisition, which views language learning as both a cognitive and social process, is becoming more popular. It is widely accepted that grammatical competence alone is insufficient for learners to have successful communication in the target language as they need to integrate it with the other components of communicative competence, which are discourse competence, sociolinguistic competence, and strategic competence (Canale & Swain, 1980; Canale, 1983). Accordingly, learners should benefit more from participation in authentic social discourse situations and discourse communities than receiving comprehensible input alone. Similarly, Watson-Gegeo and Nielsen (2003) also pointed out the importance of learning in context and knowing how to manage discourse at the point that social and cultural dimensions in communicative contexts should affect the use of linguistic forms. Therefore, although Long's interaction hypothesis is often used to account for how interactional modifications as one type of communication strategies promote second language acquisition, this study adopts a general interactionist perspective, as Ellis suggested, to understand the interactive environments constructed by text-based and video-based SCMC through investigating a wide range of communication strategies reflected on different components of communicative competence.

1.4 An Overview of Communication Strategies

Communication strategies have been studied by researchers in the field of target language acquisition since the early 1970s as communication strategy use is important for learners to communicate within restrictions and has potential for target language acquisition in terms of interaction theories. Studies published in the 1970s-1990s (e.g. Bialystok, 1990; Dörnyei, 1995; Færch & Kasper, 1983a; Kasper & Kellerman, 1997a; Tarone, 1977, 1980) were mainly based on face to face communication since SCMC was not popular at that time. Early studies often focused on the definition, identification and classification of communication strategies and then the research focus gradually moved to the empirical analysis in authentic communication. When CSs were often approached from either a psycholinguistic or an interactional perspective, one well-known conceptualization of communication strategy from an interactional perspective was offered by Tarone (1980). She defined communication strategies as “mutual attempts of two interlocutors to agree on meaning in situations where the requisite meaning structures do not seem to be shared” (p420). According to this definition, communication strategies include not only problem-management strategies that are used to compensate for inadequate language knowledge before problems occur in conversation but also problem-solving strategies that are used when problems have occurred during communication. Although Dörnyei and Scott (1995, as outlined in Dörnyei & Scott, 1997) further extended the scope of communication strategies to include every potentially intentional attempt to manage language or communication problems that the speaker notices during communication, their proposed taxonomy as well as most other taxonomies are still limited to problem-solving strategies.

When Smith (2003b) constructed a set of communication strategy categories for his study in text-based SCMC, he included strategies used to

compensate for the lack of intonation and nonverbal aids in text-based interaction as well as other strategies used to facilitate the problem-free interaction, which was indeed consistent with Canale's (1983) definition of communication strategies that refer to attempts to "enhance the effectiveness of communication" (p. 11). To investigate the use of communication strategies by learners in SCMC more comprehensively, the coding categories in this study also embrace a wide range of communication-enhancing devices used in either problem or problem-free discourse. As the construction of communication strategy categories for SCMC is also part of the purpose of the study, more relevant research about communication strategies are reviewed in chapter two.

1.5 The Research Gap for Communication Strategies in SCMC

When Smith (2003b) reported his research findings, he mentioned that perhaps Chun (1994) was the only study that had investigated use of communication strategies in SCMC from an interactionist perspective at that time. In Chun's longitudinal study, she found that computer mediated interaction promoted a variety of discourse moves, such as topic initiation and expansion, as well as interactional moves, such as clarification and confirmation requests and repair. She also observed the use of social formulas such as greetings, leave takings, and apologies as well as the use of capitalizations and exclamation marks to resemble the use of intonation. It is worth noting that Smith also investigated the use of polite tone and strategies used to compensate for the lack of nonverbal aids such as intonation and facial expressions in text-based SCMC, which he categorised as communication strategies used in problem-free discourse. Although communication strategies are important for learners to compensate for language deficiencies, learners in all language proficiencies are likely to use some strategies to facilitate communication beyond the

problems of inadequate language abilities. While these strategies may be as important as problem-solving strategies in effective communication, use of these strategies should not be overlooked in this study.

Several years later than Smith's study, Kost (2008) found that research on use of communication strategies in SCMC was still scarce when reporting her study. Apart from the aforementioned two studies, she reviewed two more studies conducted by Lee (2001, 2002b) to investigate communication strategy use during meaning and form negotiations in SCMC. The results in Lee's studies confirmed communication strategies (interactive strategies) facilitate comprehension of input and output and also revealed that request for help, clarification check, and self-correction were the most frequently used strategies in meaning and form negotiations. Indeed, there are some other studies (e.g. Fernández-García & Martínez-Arbelaiz, 2002) investigated this restricted set of communication strategies when their studies focused on negotiation of meaning in SCMC, although they did not explicitly address these communication strategies.

Although further studies (e.g. Khamis, 2010) have been published in recent years, there still appear to be limited studies comparing use of communication strategies in text-based and video-based SCMC environments comprehensively and systematically and there appears to be no study investigating use of communication strategies by tandem learning dyads between learners of English and learners of Chinese in SCMC to my knowledge.

1.6 Research Questions

Three research questions are posed based on the study purposes and the research gap presented above. These three questions are:

1. What communication strategies are employed by learners of English and

learners of Chinese to facilitate the target language communication in synchronous text-based and video-based CMC environments?

2. Are there any differences between synchronous text-based and video-based CMC in communication strategy use by learners? If so, what are the differences?

3. Do learners of English and learners of Chinese tend to use communication strategies differently in SCMC? If so, what are the differences?

1.7 Significance of this Study

Synchronous computer mediated communication, in both text-based and video-based modes, has become an important and popular means for people to communicate with each other locally or globally nowadays. As Kern and Warschauer (2000) pointed out that if the pedagogical goal is to prepare learners for participating in authentic discourse communities outside the classroom, and if those communities are increasingly located on-line, then it seems appropriate to incorporate on-line activities for their social utility as well as for their perceived particular pedagogical value (p.13). To put SCMC into pedagogical use, educators need to know the differences between text-based and video-based SCMC environments and that is where the significance of this study lies. As there appeared to be relatively limited studies of communication strategy use in SCMC, particularly in video-based mode, this study specifically addresses this research gap to account for the differences between text-based and video-based SCMC. Moreover, as it is beneficial for language learners to know what communication strategies can be utilized in SCMC and how these strategies may enhance the conversation, this study does not only identify a wide range of communication strategies from SLA literature with the specific considerations of the differences between text-based and video-based SCMC environments, but also carefully clarifies each strategy with empirical examples and

classifies these strategies in terms of their functions.

As this study addresses both target languages of English and Chinese and investigates communication strategy use by Chinese-speaking learners of English and English-speaking learners of Chinese in SCMC, the results do not only reveal the language and culturally specific aspects of communication strategy use in SCMC that has not been widely investigated but also specifically contributes to the body of research in English and Chinese learning. In addition, the tandem learning interaction that allows learners to socially interact with a native speaker in a real world setting yet within the constraints of a learning context is also one area this study intends to consider.

1.8 Outline of the Study

This study therefore aims to investigate the use of communication strategies by learners of English and learners of Chinese in text-based and video-based SCMC environments where they are communicating with each other as tandem learning dyads. The present chapter has introduced the broad areas that this study aims to address along with the importance of these areas in the field of second language acquisition. Three research questions are also posed in this chapter. By way of introduction, the present chapter will be concluded by outlining the remaining chapters.

Chapter Two reviews literature in social interaction and communication strategies in the way of making connection with this study in SCMC.

Chapter Three introduces the research method to carry out this study and also discusses the solutions to various challenges occurring in data collection and analysis. The coding categories of communication strategies in this study are also presented in this chapter.

Chapter Four clarifies all CSs in the coding categories through the data in the pilot study, and address the different turn taking structure in text-based and video-based SCMC to ensure the comparability and to describe a fair scheme to quantify the use of CSs in various turn units.

Chapter Five presents the results of investigation of communication strategy use in the four SCMC settings along with some relevant discussions.

Chapter Six presents and discusses the results of comparisons between text-based and video-based SCMC as well as between learners of English and learners of Chinese in the use of communication strategies.

Finally, the whole study is concluded in Chapter Seven. Before laying out the conclusion, a summary of this study with the emphasis on the contributions to the research methods such as communication strategy coding and the findings in the fieldwork is offered along with the implications and limitations of the study in this chapter.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This study aims to address social interaction between tandem learning dyads in both text-based and video-based synchronous computer mediated communication (SCMC) to investigate the use of communication strategies (CSs) in the target languages by learners of Chinese and learners of English. The previous chapter has provided an overview of SCMC and CSs as they are two vital areas for this study. In addition, the interaction hypotheses have also been briefly introduced to situate this study in the field of second language acquisition (SLA). Following the outlined issues, this chapter delves more deeply into previous research on social interaction and CSs in the field of SLA and also clarifies how the present study with the focus on SCMC can be connected with these SLA studies.

In the first part of this chapter, studies of interaction, particularly the interaction hypotheses, are reviewed to understand the relation of social interaction to second language acquisition and thereby introduce the theoretical framework of this study. Moreover, as negotiation is highlighted in the interaction hypotheses and the present study focuses on SCMC, research on negotiation in SCMC is reviewed specifically.

The second part will address research on CSs in the field of SLA. Studies of CSs are often broadly classified into two theoretical approaches: psycholinguistic and interactional approaches (Cook, 1993; Ellis, 1994; Kasper & Kellerman, 1997b). Definitions and taxonomies from the two approaches will be introduced to justify the adoption of interactional approach in the present study.

The third part will review empirical studies of CS use to get the ideas about some possible factors in CS use that may need to be taken into consideration when

comparing the use of CSs in different modes of SCMC as well as in different target languages, English and Chinese.

2.2 Interaction and Second Language Acquisition

Interaction has been commonly acknowledged as playing an important role in second language acquisition, although the account of interaction in the process of SLA still diverges from different theoretical perspectives. As outlined in the previous chapter, quite a few of the SCMC mentioned studies were grounded in either the interaction hypotheses advanced by Long (1981, 1983, 1996) or in the sociocultural theory that originated from the work of Vygotsky and then was applied to the field of SLA by researchers such as Lantolf among others (2000) and Lantolf and Thorne (2006). Consonant with Lantolf (1996) who argued that different theories afford different insights into the complexities inherent in SLA, this study does not intend to argue for one superior interaction theory but views interaction from a general interactional perspective as Ellis (1999) drew from his review of interaction theories. That is, interaction in general plays an important role in SLA, although some types of interaction may offer greater potential for SLA.

Two different activities are implied from the idea of interaction, which are interpersonal interaction and intrapersonal interaction, and they are closely connected with each other in regard to language use as well as language acquisition (Ellis, 1999). Intrapersonal interaction involved in mental processing is not only necessary for language acquisition as cognition developing but also for language use when interacting interpersonally. The notion that intrapersonal interaction is required for interpersonal interaction is parallel to the framework of communicative language ability which Bachman (1990) proposed, in which strategic competence, a mental ability, serves as an executive role to co-ordinate all kinds of knowledge (mental

resources) into communicative language use. From this standpoint, communication strategy covers extensively a wide array of communication enhancing devices in either problem-free or problem discourse. On the other hand, interpersonal interaction, also known as social interaction, may not be necessary when acquiring languages other than the first language, but it offers great potential for SLA. This study is indeed grounded on the assumption that social interaction can facilitate SLA. Social interaction, occurring in either face to face communication or computer mediated communication, serves to trigger mental operations of SLA and also problem-solving strategies. Problem-orientedness has been considered as one criterion for defining CSs by the majority of the CS literature (e.g. Bialystok, 1990; Dörnyei & Scott, 1997; Færch & Kasper, 1983b). CSs in these studies were viewed as devices to solve communication problems, including but not limited to linguistic problems. Indeed, the use of a communication strategy is difficult to identify clearly as language use or language acquisition when the cognitive processes reflected in the communicative language use are dynamic and influenced by internal and external factors involved in social interaction. As many of the CSs investigated in this study can be grounded strongly in the interaction hypotheses, the relationship between interpersonal and intrapersonal interaction with regard to SLA will be further examined based on the interaction hypothesis in the following sub-section. In addition, research about negotiated interaction in SCMC will also be reviewed since negotiated interaction is particularly beneficial for SLA based on the interaction hypothesis and more importantly it is closely related to CSs used to modify input and output toward comprehensibility.

2.2.1 The Interaction Hypotheses

Input, which refers to linguistic forms addressing to language learners¹, is generally considered as fundamental to SLA. According to the input hypotheses (Krashen, 1985), linguistic input that serves as data for acquisition has to be comprehensible and at the same time slightly beyond learners' current state of language competence, which is also known in the formulaic form as $i+1$. That is indeed the common ground shared between the input hypotheses and the interaction hypotheses (Long, 1981, 1983, 1996). Nevertheless, while the input hypotheses counter the role of output in SLA, the interaction hypotheses take learners' performance into account and emphasize the importance of two-way interaction for SLA. This difference becomes even more salient in the updated version of the interaction hypotheses (Long, 1996).

While comprehension is presumed crucial for SLA, the interaction hypotheses (Long, 1981, 1983) indicate modifications in interaction can improve second language comprehensibility and thereby facilitate SLA. Interaction, which refers to the functions linguistic forms serve in conversation, can be distinguished from linguistic input. Accordingly, modified interaction and modified input can also occur independently. The same linguistic speech may be repeated when it fails to be comprehended at the first attempt. Although the linguistic input remains unmodified, the interactional structure of conversation has been modified since the repetition carries a different function in the conversation. As interactional modifications were consistently observed even when linguistic modifications were absent, the

¹ Krashen (1985) argued that language can only be acquired, not learned. Acquisition refers to a subconscious process, while learning refers to a conscious process, which results in conscious knowledge that can only be used when learners monitor their output. Accordingly, some studies make a clear distinction between "acquirer" and "learner". Nevertheless, as the results of these two processes can all serve as prior knowledge and affect the cognitive processing involved in SLA, this study does not intend to emphasize this distinction and use the term "learners" consistently across the whole study body.

importance of interactional modifications to second language comprehensibility was argued (Long, 1981, 1983). In fact, this claim has been supported by the finding that interaction resulted in better comprehension than pre-modified input (Gass & Varonis, 1994; Loschky, 1994; Mackey, 1999; Pica, Doughty, & Young, 1987).

Although interactional modifications and linguistic modifications can be analyzed separately, they are indeed closely connected. Pica, Doughty, and Young's (1987) study found that interactional modifications in the form of confirmation and comprehension checks and clarification request brought a great number of repetitions that are necessary for comprehension. When these repetitions can be either exact or partial and either semantic or paraphrase, the linguistic complexity may be preserved when improving comprehensibility. Indeed, their study has found that interaction brought about an increase in complexity. As removing all the unknown linguistic forms may at the same time prevent learning new forms, the value of interactional modifications is actually rested on the possibility of balancing comprehensibility and complexity, which are both essential to SLA (Gass & Varonis, 1994; Long, 1996).

While according the importance the role of interactional modifications plays in second language comprehensibility and acquisition, it seems more plausible to highlight how learners construct mutual comprehension with their interlocutors than how comprehensible input is provided for learners. As the early version of interaction hypothesis (Long, 1983) emphasized how interactional modifications bring about comprehensibility in native speaker and non-native speaker conversation, Krashen (1985) commented it is not fundamentally different from the input hypotheses if negotiated interaction is mainly for more comprehensible input. With the highlight of mutual comprehension, Yule and Tarone (1991) suggested that communication strategies used by learners may provide an analytic framework to investigate both sides of interaction. They explained that negotiated input is the

result of collaborative moves by both learners and their interlocutors and these moves in the interaction can be effectively described within a communication strategy framework that can be applied to both sides of the transcription. In fact, the interactional modifications described in Long's study (1983) such as confirmation and comprehension checks and clarification requests have been viewed as communication strategies in various taxonomies such as Dörnyei and Scott's (1995, in Dörnyei & Scott, 1997). Interactional modifications fall into two categories in terms of the purpose, which are discourse management and discourse repair² (Ellis, 1994; Long, 1983). The former serves to avoid communication problems that may cause conversational breakdown, while the latter serves to solve the communication problems occurring in conversation. As long as learners remain in conversation, they are exposed to rich and complex input that is dynamically adjusted to become comprehensible for them. More importantly, when communication problems occur or a common ground between learners and their interlocutors is absent, learners have to negotiate with their interlocutors to achieve mutual comprehension and such negotiated interaction is indeed highlighted in updated version of the interaction hypotheses.

Along the line of argument above, Gass (2003) also suggested that input (positive evidence) is less important than feedback (negative evidence) and output when according an important role to conversation as a basis for SLA. The functions of feedback and output to facilitate SLA appear to be salient as comprehensible input can be obtained from resources other than conversation. Swain (1985) argued the need for output based on her observation of an immersion program (students in the

² Long (1983) called interactional modifications used to avoid conversational trouble as "strategies" and those used to repair discourse when trouble occurs as "tactics". Nevertheless, this study includes both types of interactional modifications as communication strategies and thus purposely avoids using these two separate terms to prevent possible confusion.

program learn subjects such as mathematics in a target language other than their first language). These students who received sufficient comprehensible input in the target language for years were able to perform as well as native students in achievement tests of subject matter and also in a listening comprehension test; however, they tended to be less proficient in producing the target language than native students. Swain explained this finding by pointing out the lack of output. These students often received lectures on subject-matter without having many two-way interactions with their teachers or other students. As a result of limited output, one immersion student reported that he realized a gap between what he thought the utterances should sound like in his mind and his produced utterances. It therefore seems reasonable to state that more input (listening and reading) may facilitate better output (speaking and writing); however, it may not as plausible to state that sufficient reading without any training or previous experience of writing will guarantee that one can write well. Along these lines, Krashen's claim that output could emerge from sufficient comprehensible input may not be so plausible.

Output that functions as language practicing can most likely enhance fluency (automaticity) of the target language. As this function is beneficial but not essential for SLA, the role of output in SLA is often disputed. Swain (1985, 1995, 1998) defined three functions of output in regard to SLA, which are noticing, hypothesis formulation and testing, and reflective functions. Producing output itself or feedback on learners' output can both function as a trigger for learners to consciously notice the mismatch between their communicative intention and linguistic resources as well as between their received input and produced output. Noticing a gap may engage learners in cognitive processes of generalizing new knowledge or consolidating existing knowledge in order to modify output and thereby facilitates SLA (Swain & Lapkin, 1995). In addition, this kind of conscious

noticing can also allow learners to acquire target-like forms (Schmidt & Frota in Swain & Lapkin, 1995) since the content of meaning negotiation is often the language form (Swain, 1995). At this point, output should be able to promote the development of accuracy. In addition, output can also allow learners to formulate and test out hypotheses (e.g. new language forms and structures). Feedback on their output could contribute to acquisition in terms of providing learners metalinguistic information. It is also possible that learners may receive negative feedback if their output fails to be understood. Negative feedback would push learners to make modifications for comprehensible output. Swain (1985) noted that only output that have been pushed in this way could facilitate acquisition. She found that as students in the immersion program could communicate with their teachers or peers well by using their interlanguage (a learner's language that is not target like yet), they were not pushed to modify output to become comprehensible and thus their interlanguage might stop moving toward target like forms. Finally, output can function as metatalk. Learners may use language to indicate something they are aware of in their own or their interlocutors' use of language, that is, to reflect upon the language use. This metatalk may deepen learners' awareness of forms and rules as well as the relationship of the forms and rules to the meaning they are trying to express, and it may also help learners to understand the relationship between meaning, forms, and function in a highly context-sensitive situation (Swain, 1998, p. 69).

As interpersonal interaction and intrapersonal interaction are closely connected with each other in regard to SLA, it is also important to understand the cognitive processing involved in SLA. The cognitive process can be illustrated by the framework that was originally purposed by Gass (1988) and then developed by Ellis (1994). Five levels of cognitive stages are identified in the process, which are from apperceived (noticed) input, comprehended input, intake, integration, to output.

When learners are exposed to massive input during social interaction, noticing that may be facilitated by negotiated interaction serves as the first step to filter what input can pass through the cognitive process. Along this line of argument, Schmidt (1990) also claimed that noticing is the necessary condition for converting input to intake, which is part of input that has been consciously noticed and therefore taken into temporary memory. Nevertheless, not all the noticed input can become intake. Comprehended input is only another step toward intake. Gass argued that comprehended input is more important than comprehensible input. Comprehended input is actively controlled by the learners, while comprehensible input depends on their interlocutors making modifications. Moreover, there are different levels of comprehension such as semantic understanding or a syntactically analytical level of understanding. The level of comprehension may affect the comprehended input will be converted into intake or will only be used for communication. Once input becomes intake, it can be integrated to become implicit knowledge for learners to employ intuitively when producing output as in most cases of first language use, and some intake that is not ready to become implicit knowledge might be stored as explicit knowledge and available for learners to refer and employ consciously (Ellis, 1994). That is, explicit knowledge can also contribute to output through “monitoring” (in Krashen’s term). In addition, Ellis (1994) emphasized the dynamically interactive feature of his developed framework by pointing out that the produced output can affect the sequential input through negotiated interaction and interactional modifications.

Acknowledging the roles of output and the cognitive process in SLA, Long (1996) updated his interaction hypotheses and purposed “environmental contributes to acquisition is mediated by selective attention and the learners’ developing L2 processing capacity, and that these resources are brought together most usefully,

although not exclusively, during negotiation for meaning” (p.414). Negotiated interaction allows learners to decide what they want to pay attention to and actively work on the meaning and form of the selected point with their interlocutor. In addition, negotiated interaction that is triggered by the negative feedback forces learners to engage in cognitive processes of generalizing new knowledge or consolidating existing knowledge to modify toward comprehension. As negotiated interaction provides opportunities for receiving feedback and modifying toward comprehension of input as well as output, a positive environment for SLA is created. These claims can be supported by empirical studies such as Gass and Varonis’s (1994) and Mackey’s (1999). Accordingly, the use of CSs may facilitate SLA since it helps learners engage in interaction with a native speaker or a more competent interlocutor that often forces them to perform beyond their current level of competence to achieve mutual comprehension.

2.2.2 Negotiated Interaction in SCMC

Whereas negotiated interaction can provide a positive environment for SLA through not only facilitating language comprehension but also drawing attention to language form as reviewed above and also in Pica (1994), a great number of studies have shown the potential for SLA in text-based SCMC through their investigation into either negotiated interaction from an interactional perspective (e.g. Blake, 2000; Smith, 2004) or collaborative interaction from a sociocultural perspective (e.g. Lee, 2004; Peterson, 2009). Some studies (e.g. Pellettieri, 2000; Sotillo, 2005) also shown a text-based SCMC environment promotes both meaning-oriented and form-focused activities and other studies suggested that the written nature and the extended processing time in text-based SCMC enhance the processes of noticing language forms (e.g. Lai & Zhao, 2006; Shekary & Tahririan, 2006). There are also some

studies that supported the potential for SLA in audio or video-based SCMC (e.g. Jepson, 2005; Zöhner, Fauverge & Wong, 2000). It is worth noting that Jepson suggested that learners were more inclined to negotiate in voice chat compared with text chat. He found that most repair moves in voice chat were pronunciation-related.

While many studies investigated negotiated interaction in terms of Varonis and Gass's (1985) model, Smith (2003a) argued that their model cannot precisely reflect the sequence of negotiated interaction in text-based SCMC since it was developed from face to face communication. Therefore, he aimed to expand Varonis and Gass's model in order to reflect computer mediated negotiated interaction. Varonis and Gass's model consists of trigger and resolution these two parts. The trigger (T) refers to part or whole utterance that is not comprehensible for the listener. The listener can chose to ignore the trigger or indicate the non-understanding. By indicating the problem, the routine of negotiation moves to the part of resolution. The part of resolution is potentially encompassing three phases, which starts with an indicator (I) and is followed by response (R) and reaction to the response (RR). The routine of negotiation may terminate when the indicator is responded, but sometimes it may carry on to the optional phase of RR.

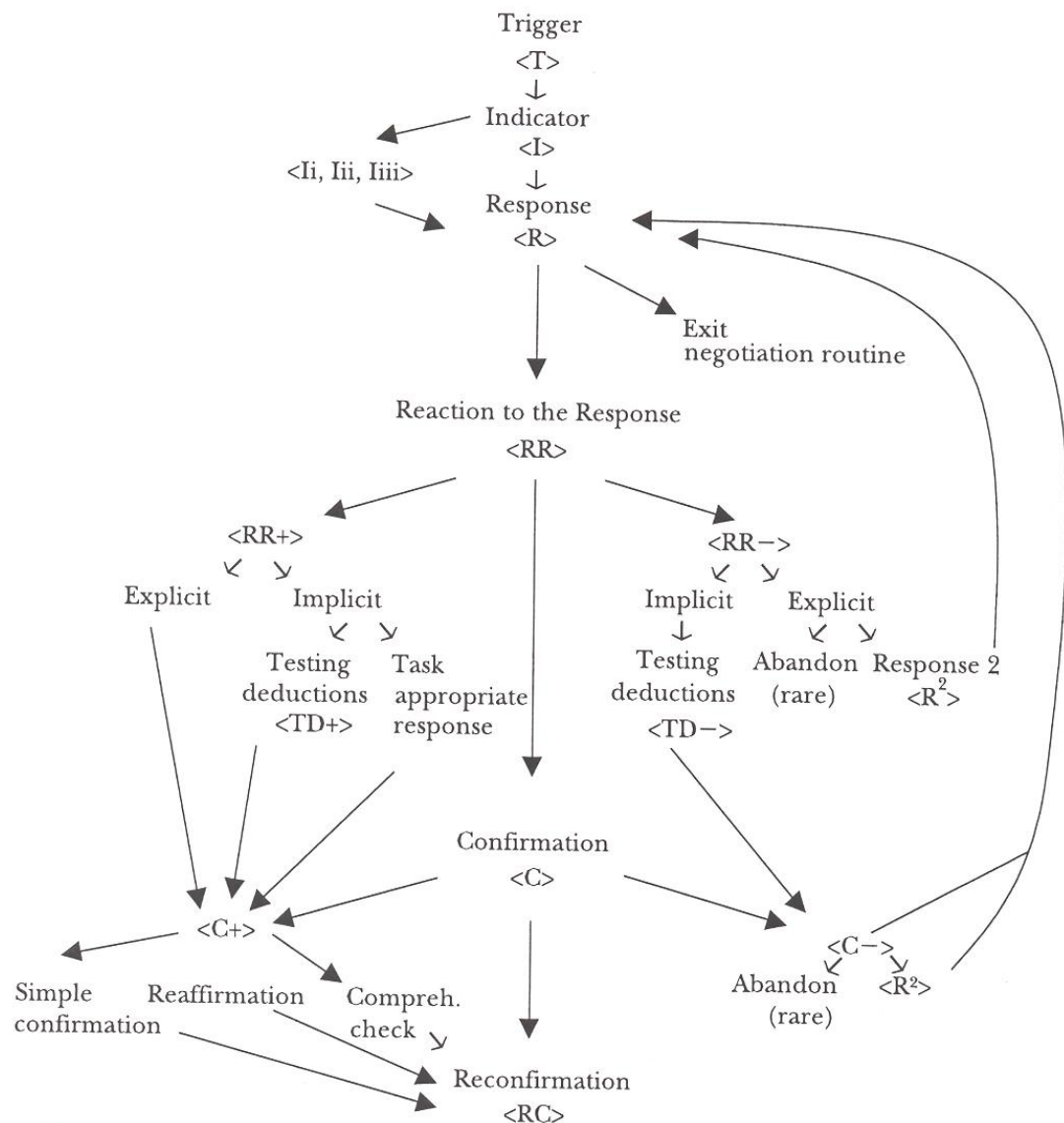
Based on Varonis and Gass's model, both Smith (2003a) and Kost (2008) found a very high percentage of complete negotiations (from T to R or to RR) in a text-based SCMC environment, which were 93% of and 83% respectively. As regards the relation between CSs and negotiation, Kost found that the sequence of negotiations was mostly triggered by asking for clarification (93.7%), followed by asking for confirmation (3.6%) and by expressing non-understanding (2.7%). According to Varonis and Gass (1985), when an indicator triggers the negotiation, it actually halts the main conversation horizontal progressing. The negotiation actually 'pushes down' the conversation and RR may serve to signal that the listener is ready

to resume the main line of conversational discourse. Similarly, Kost found in her study of SCMC that learners often reacted to the response by either thanking their partner for the response or indicating the response was understood and then the main line of conversation was resumed. Smith found that 82% of negotiations reached the optional phase of RR in a text-based SCMC environment. He suggested that the listener may feel highly compelled to explicitly mark the closure of the negotiation routine during text-based SCMC and thus negotiations completed at the phase of RR in text-based interaction tended to occur more often compared with face to face interaction. He attempted to support this claim by comparing the previous studies addressing face to face interaction that showed 23-35% of negotiations were completed at the phase of RR. At this point, the result that 38% of negotiations completed at the phase of RR in a text-based SCMC environment in Kost's study can also support this claim, although the percentage was not as high as in Smith's. Kost suggested that the lower percentage in her study might result from the different task types. As the task in her study did not require learners to work out specific unknown lexical items in order to complete the task as in Smith's, learners in her study might have felt less compelled to acknowledge a response. Apart from a clear transit back to the mainline of conversation, making a new topic salient has been considered as a strategy of discourse management to avoid communication problems (e.g. Long, 1983). Smith (2003b) found the high frequent use of explicitly marking a signal topic shift in text-based SCMC and suggested the frequent use of framing topic shifts might be promoted in text-based SCMC since interlocutors were unable to mark the topic shifts by intonation as they often did in face to face communication. This claim may be testified in this study by comparing the use of this strategy in text-based and in video-based SCMC.

As Smith (2003a) found negotiation routines in text-based interaction

appeared to be more dynamic than the linear sequence described in Varonis and Gass's model, he proposed split negotiation routines in his model of computer mediated negotiated interaction (see figure 1 below). The split negotiation routines are indeed affected by the lack of turn adjacency in text-based SCMC since it may cause one trigger to get a delayed response and the indicator may be repeated. Although the conversation may get sidetracked between the trigger and the delayed response, it is rare that a trigger is permanently ignored. It was also found in Peterson's (2006) study that split turns were used to supply additional information and move the discourse forward (multiple topics in one turn) due to the lack of turn adjacency in text-based interaction. It is interesting that the use of split turns was also reported in Simpson's (2002) study, but it was described as one turn split into parts (sent out piece by piece when typing) in order to hold the 'floor'. It seems that the turn taking systems appear to be different in text-based and video-based SCMC and the lack of turn adjacency in text-based SCMC affects the negotiation routine as well as the way to manage text-based discourse. As the present study aims to compare the use of CSs in the two modes of SCMC, it is important to find a comparable way to identify the turn taking systems. Therefore, this issue will be further addressed in chapter four with the examples excerpted from the pilot study.

Figure 1 Smith's model of computer mediated negotiated interaction (Smith, 2003a, p. 50)



In addition to the split negotiation routines, Smith also added the phases of confirmation (C) and reconfirmation (RC) to his expanded model. These two phases are influenced by RR that can be positive (show understanding of the response) or negative (show partial or non-understanding of the response). The trigger (what is not understood) can be an utterance of either learners or their interlocutors. If learners modify their output (the trigger) to be comprehensible in response to an indicator, they may get a positive reaction. Otherwise, they may get a negative

reaction and are forced to make further modifications. Smith's two added phases appear to be more effective to illustrate another case where non-understanding is indicated by learners. If learners get a response that is comprehensible for them, they may explicitly show their understanding (a positive reaction to the response) that may lead the interlocutors to resume the main conversation or to make a confirmation. It is also possible that learners show their understanding implicitly by either testing deductions or giving a task appropriate response. By giving a task appropriate response, the main conversation has indeed been resumed. By testing deductions, learners may get positive confirmation if their deductions are correct. If the deductions are incorrect or non-understanding is indicated explicitly (a negative reaction to the response), learners may get further explanations from their interlocutors as responses. These processes described above are connected to the functions of output such as hypothesis testing (Swain, 1985, 1995, 1998) and supposed to be beneficial for SLA. Nevertheless, these two added phrases were not observed in Kost's (2008) study of text-based SCMC, although the model was claimed to reflect negotiation routines in a text-based SCMC environment. Kost found that learners in her study tended to provide a translation as a response since they all shared a common language other than the target language and suggested this model seemed more applicable to interaction between interlocutors who only share one common language. Indeed, Fernández-García and Martínez-Arbeláiz (2002) also suggested the use of L1 might affect negotiation since it was an efficient and fast means for learners share L1 to return to the horizontal line of the main conversation. As interaction observed in the present study is between tandem learning dyads that means all participants know their peer's first language as their learned language, the possible interference of translations in negotiation and CSs use needs to be considered.

2.3 Communication Strategies in SLA Research

Communication strategies are to successfully achieve communicative goals and they are particularly important for language learners with restricted language knowledge to effectively communicate in the target language. Despite the fact that learning is not the primary function of CSs, there is a close connection between CSs and second language acquisition in SLA theories that emphasize the role of input, output, feedback, and cognitive processing (Kasper & Kellerman, 1997b, p.7). Indeed, the potential for language acquisition is one reason some researchers (e.g. Oxford & Crookall, 1989) counter the view that communication strategies are a different type of strategy used by learners from learning strategies (e.g. Ellis, 1994; Selinker, 1972; Tarone, 1980), while they view any steps taken by learners to facilitate acquisition as learning strategies. Tarone (1980) clarified that the desire to communicate an intended meaning is a necessary criteria to identify CSs, while the basic motivation for using learning strategies is to learn. From this aspect, memory strategies identified in research on learning strategies (e.g. Oxford, 1989) are not one type of CSs. Moreover, while research in CSs (as will be reviewed in this section) focus on strategies used to communicate an intended meaning and to facilitate communication, research in learning strategies (e.g. Oxford, 1989; Oxford & Lin, 2010) focus on effective strategies for learning or strategies used by good learners. Despite some overlap in some sub-categories, CSs may not always be effective for learning and vice versa. In addition, effective communication and effective learning may on occasion be a conflicting goal in conversation outside a learning setting as the conversational flow may be harmed by too many learning-oriented questions, especially if interlocutors do not want to spend time in this regard. Although CSs in general are likely to facilitate language acquisition as conversation is also the means by which target language acquisition takes places (Gass, 2003) and this study also

intends to speculate the learning conditions offered by the two modes of SCMC in terms of some particular CSs based on the interaction theories reviewed above, the nature of this study is indeed to investigate how strategies are used to facilitate communication rather than learn the target language. Accordingly, studies reviewed in this section are all on the nature of communication strategies.

Studies of CSs are often broadly classified into the psycholinguistic and sociolinguistic (interactional) approaches in terms of their perspectives on CSs (Cook, 1993; Ellis, 1994; Kasper & Kellerman, 1997b). Literature on both approaches to CSs is reviewed in this section; nevertheless, the focus is on the interactional approach since it is from this perspective the study views CSs. In addition, although there has been broad agreement about what kinds of CSs in interlanguage performance are observable among SLA researchers, the ways they have treated observable strategic behaviors appear to be diverse (Kasper & Kellerman, 1997b). To illustrate the differences, the most well-known taxonomies purposed by Tarone, Færch and Kasper, Dörnyei and Scott, and the Nijmegen group³ are also reviewed in this section.

2.3.1 The Psycholinguistic and Interactional Approaches to CSs

Studies of CSs in a psycholinguistic approach treat CSs as cognitive processes involving perception and production in a target language. From a psycholinguistic perspective, Færch and Kasper (1983b) defined CSs as “potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal” (p. 36). This definition highlighted the feature of problem solving. Problem-orientedness (or problematicity using

³ Researchers such as Bongaerts, Kellerman, and Poulishse at Nijmegen University reported a series of paper of communication strategies and proposed an extensive taxonomy based on the cognitive nature of CSs (as outlined in Ellis, 1994).

Bialystok's term, 1990) is indeed the primary defining criterion of CSs in most studies, regardless of which theoretical approach they took. Dörnyei and Scott (1995, in Dörnyei & Scott, 1997) further defined four different types of problems learners might encounter in second language communication. Based on existing CS studies, they identified problems of 'resource deficits', which refer to gaps between the communicative intention and the inner linguistic resources. To reflect the real use of CSs, they identified the other three types of problems: 'own-performance problems', 'other-performance problems', and 'processing time pressure'. Learners may realize something in their utterances is incorrect or not target like and thus they may need to use CSs such as self-repairing, self-rephrasing, and self-editing. Or they may have problems to understand their interlocutors and need to negotiate to achieve mutual understanding. Moreover, Dörnyei and Scott pointed out that learners often need more time to process and organize their speech in the target language than the speech in their native language and identified the problem of processing time pressure in second language communication. Accordingly, stalling (time gaining) strategies such as the use of fillers and self-repetitions are included in Dörnyei and Scott's taxonomy of CSs, although these strategies are not strictly meaning related (Dörnyei, 1995; Dörnyei & Scott, 1997).

While problem-orientedness is recognized as the primary criterion, Færch and Kasper (1983b) suggested adopting consciousness as the secondary criterion that is indeed derived from the criterion of problem-orientedness. By using CSs, learners have to be aware of the problems they might encounter and of the available devices for them to solve the problems. They emphasized that it is the plan being conscious about, while the plan may not always be employed consciously. They argued it is problematic to define CSs as consciously employed plans since "consciousness is perhaps more a matter of degree than either-or" (p. 35). As consciousness seems to

have different connotations, Bialystok (1990) and Dörnyei and Scott (1995, in Dörnyei & Scott, 1997) all attempted to deconstruct it. Bialystok separated intentionality from consciousness and referred it to “the learner’s control over a repertoire of strategies so that particular ones may be selected from the range of options and deliberately applied to achieve certain effects” (p. 5). Based on Schmidt’s four basic senses of consciousness (intentionality, attention, awareness, and control), Dörnyei and Scott argued that three aspects of consciousness are particularly relevant to CSs: consciousness as awareness of the problem, consciousness as intentionality, and consciousness as awareness of strategic language use. Nevertheless, they argued that consciousness as control should not necessarily be a defining criterion of CSs since one purpose of CS training is to enhance automatization (Dörnyei, 1995; Dörnyei & Scott, 1997).

As regards the connection between CSs and second language learning from a psycholinguistic perspective, Færch and Kasper (1983b) suggested the use of CSs can facilitate SLA if the cognitive process involves hypothesis formulation and testing, and feedback from the interlocutor is available, which appears to be consonant with Swain’s pushed output. Consequently, they suggested that only achievement strategies can facilitate SLA. Achievement strategies refer to the attempts at extending and manipulating all kinds of resources to convey the intended message, which Corder (1983) considered as “success oriented though risk-running strategies” (p. 17). Reduction strategies, on the other hand, refer to attempts at altering, reducing, or abandoning completely the original message due to resource deficits. Færch and Kasper claimed that reduction strategies along with some achievement strategies such as code switching and non-linguistic strategies generally did not have the potential for second language learning. Nevertheless, Tarone (1980) countered the claim and argued from an interactional perspective that these strategies

can possibly facilitate SLA through eliciting help from the interlocutors.

From an interactional perspective, Tarone (1980) defined CSs as “mutual attempts of two interlocutors to agree on meaning in situations where the requisite meaning structures do not seem to be shared” (p 420). Studies that adopt this approach view CSs as discourse maintenance devices in interaction between two interlocutors. Tarone also pointed out that research on CSs, foreigner talk⁴, and repair in interlanguage are indeed observing the same phenomenon occurring in interlanguage communication within a different conceptual framework. From this aspect, the connection of CSs and SLA appears to lie on the aforementioned interaction hypotheses. While negotiated interaction is considered effective to facilitate SLA, Yule and Tarone (1991) suggested that CSs may provide an analytic framework to investigate both sides of interaction and Tarone (1980) also suggested defining CSs in functional terms to reflect the mutual attempt by learners and their interlocutors at solving problems and achieving mutual understanding. In the same vein, Long (1983) also conceptually defined CSs from an interactional perspective as devices to avoid communication problems and prevent the conversation broken down, although he termed discourse repairs separately as tactics. Dörnyei and Scott (1997) claimed that repair mechanisms such as requesting and providing clarification could be included in communication strategy categories if CSs are viewed as tools for negotiation to achieve mutual comprehension. At this point, the scope of CSs in an interactional approach seems to be broader compared with a psycholinguistic approach.

⁴ Foreigner talk was defined by Hatch (1979) as “aspects of input which promote comprehension and/or language learning” (as quoted in Tarone, 1980, p. 422).

2.3.2 Taxonomies and Classifications

Various taxonomies of CSs have been purposed in the literature due to the different conceptual definitions and research purposes. There has been a marked divergence of opinions on analytic perspectives as well as possible pedagogical implications between two main taxonomic approaches (Yule & Tarone, 1997). One approach focuses on the external and interactive performance data to consider the underlying competence, while the other approach focuses on the underlying internal and cognitive competence to offer accounts for performance data. Moreover, studies in the former approach are often in favor of teaching the use of CSs, while the latter often argue against it. As regards the convergence of taxonomies, Bialystok (1990) remarked that the variety of taxonomies differ primarily in terminology and overall categorizing principle rather than in the substance of the specific strategies (p. 61). She specifically pointed out that Tarone's typology best captures a core group of CSs appearing consistently across the taxonomies.

Tarone was the first to provide a definition along with a typology in this field and her typology has been considered as one of the most influential since then (Dörnyei & Scott, 1997). Five CSs were identified in her typology⁵, namely, avoidance, paraphrase, conscious transfer, appeal for assistance, and mime (Tarone, 1977). Her typology has included reduction strategies (i.e. avoidance), although an achievement-reduction distinction was not explicitly marked. The typology also includes compensatory strategies that involve manipulating available language knowledge to compensate for the deficient parts of language knowledge (i.e. paraphrase and conscious transfer) as well as interactional strategies (i.e. appeal for assistance) and paralinguistic strategies (i.e. mime). Nevertheless, the repair

⁵ There are sub-categories under some of these five CSs. Paraphrase contains three sub-categories, which are approximation, word coinage, and circumlocution. Transfer includes literal translation and language switch. Avoidance includes topic avoidance and message abandonment.

mechanisms are not really included in her typology, although her modified definition⁶ allows the inclusion of discourse repairs (Dörnyei & Scott, 1997).

Tarone's typology and Færch and Kasper's (1983b) taxonomy are often compared due to some resembling CS categories and the influences on the field. Færch and Kasper attempted to classify CSs into categories based on a psycholinguistic framework. They located CSs within a general model of speech production that can be divided into a planning phase and an execution phase. In the planning phase, learners establish a plan through selecting what they consider most appropriate. Then, the execution of this plan will lead to verbal behavior that is expected to achieve the communicative goal. CSs are considered best being placed in the planning phase. When realizing the problems, learners may either develop alternative plans to achieve the original goals (achievement strategies) or change the communicative goals to avoid errors or increase fluency (reduction strategies). An explicit achievement-reduction distinction is made in their taxonomies and then sub-categories are identified under these two categories.

Dörnyei and Scott (1995, in Dörnyei & Scott, 1997) also attempted to classify CSs in their extended taxonomy of problem-solving strategies. Instead of an achievement-reduction distinction, they classified CSs into three categories according to the manner of problem management, namely, direct strategies, indirect strategies, and interactional strategies. Direct strategies involve manipulating the available language knowledge or altering the intended message to compensate for inadequate language knowledge. Indirect strategies refer to attempts to create a condition which facilitates meanings being conveyed indirectly. Interactional

⁶ Tarone (1977) proposed that "conscious communication strategies are used by an individual to overcome the crisis which occurs when language structures are inadequate to convey the individual's thought" (p. 195). A few years later, she (1980) claimed that CSs are most clearly defined as "mutual attempts of two interlocutors to agree on meaning in situations where the requisite meaning structures do not seem to be shared" (p.420).

strategies involve problem-solving exchanges between two interlocutors. Within each category, four types of problems were identified. That is, each category is divided into four sub-categories, namely, ‘resource deficit-related strategies’, ‘own-performance problem-related strategies’, ‘other-performance problem-related strategies’, and ‘processing time pressure-related strategies’. As a result, they formed a 3 (ways of problem management)-by-4 (types of communication problems) matrix. Except for direct and interactional processing time pressure-related strategies, and indirect resource deficit-related strategies, there are several sub-strategies under each category. Their taxonomy is one of the most extensive and influential taxonomies and has been adopted by empirical studies such as Kost’s (2008).

When different taxonomies attempted to expand the existing CS categories, the Nijmegen group adopted an oppositional approach to this and worked specifically on a subset of CSs, compensatory strategies, for lexical problems solving. Kellerman (1991) argued that the classification of various linguistic realizations is not as important as the characterization of psychological processes underlying CSs for research on the way a target language is acquired and used. Indeed, ‘psychological plausibility’ is considered as the most important requirement for proposing taxonomy of CSs as cognitive processes (Kellerman & Bialystok, 1997). That is, an adequate taxonomy should be compatible with what currently known about language processing, cognition and problem-solving behavior. In addition, an adequate taxonomy of CS should also meet the other two requirements: ‘parsimony’ and ‘generalizability’ (Kellerman, 1991; Kellerman & Bialystok, 1997). That means the taxonomy should posit as few discrete strategy types as possible and be equally applicable to various tasks, languages, and learners.

According to their proposed requirements, the Nijmegen group proposed a two-strategy taxonomy that reflects two options of language processing underlying

various strategic behaviors (e.g. Kellerman, 1991; Poulisee, 1987). The two strategy types are labelled 'conceptual strategies' and 'code strategies' in Kellerman's (1991) study. The former involves manipulating the concept of the intended message into an expressible form through the individual's available linguistic resources, while the latter involves manipulating the individual's knowledge of word forms through the construction of ad hoc labels for the target terms. There are two approaches to conceptual strategies: holistic and analytic. The holistic approach is to use substitute terms that share some features with the target term or belong to the same category hierarchy, which is associated with 'approximation' in Tarone's as well as in Dörnyei and Scott's taxonomies. The analytic approach is to select and articulate particular features of the target term, which is associated with 'circumlocution'. Kellerman used 'code strategy' instead of 'linguistic strategy' as in earlier papers of the Nijmegen group in order to embrace both linguistic strategies and nonverbal means (such as pointing at an object). Nevertheless, he noted that the mimetic gestures which depicted semantic features of the target term would be posited in a conceptual strategy. There are also two approaches to linguistic strategies, which are transfer (other languages based) and morphological creativity (the target language based). While the Nijmegen's binary taxonomy reflects a conceptual-code (meaning-form) distinction, Kellerman (1991) remarked that Bialystok's distinction between two components of cognitive processing, which are analysis of knowledge and control of processing, could provide some insights into how learners decide on which strategy type to use at a given moment. Generally, when demands for control of processing are greater, learners tend to use the code strategy more frequently to cope with limited processing capacities. Although each cognitive process is capable of acting on either representations of meaning or form, the demands made of controlling process in the exploration of language meaning is not an option for compensatory

strategies (Kellerman & Bialystok, 1997). The four possible options generated from two cognitive processes and two knowledge representations are shown in figure 2, in which some individual CSs investigated in this study are located accordingly. It is noted that strategies associated with morphological creativity are not included in the coding categories of this study. Morphological creativity⁷ may help communication, but it seems inappropriate to include in coding categories which aim to have pedagogical implications as it usually involves incorrect forms in the target language. Nevertheless, learners' intentional use of the incorrect form is investigated in this study through the use of verbal strategies markers. This strategy can not only prevent possible conversational breakdown by signaling to the interlocutor about less accurate target language form, but also indicate learners' noticing a gap between the communicative intention and their inner linguistic resources, which is important for SLA.

Figure 2 Operation of analysis and control processes on representations of meaning and language (adapted from Kellerman & Bialystok, 1997, p. 36)

	Process of Analysis	Process of Control
MEANING REPRESENTATIONS	CONCEPTUAL STRATEGY <ul style="list-style-type: none"> • Circumlocution • Approximation • Mime* 	NON-COMPENSATORY STRATEGY <ul style="list-style-type: none"> • Message abandonment* • Message replacement*
LANGUAGE (FORM) REPRESENTATIONS	morphological creativity such as word coinage CODE STRATEGY	<ul style="list-style-type: none"> • Literal translation • Request for help*

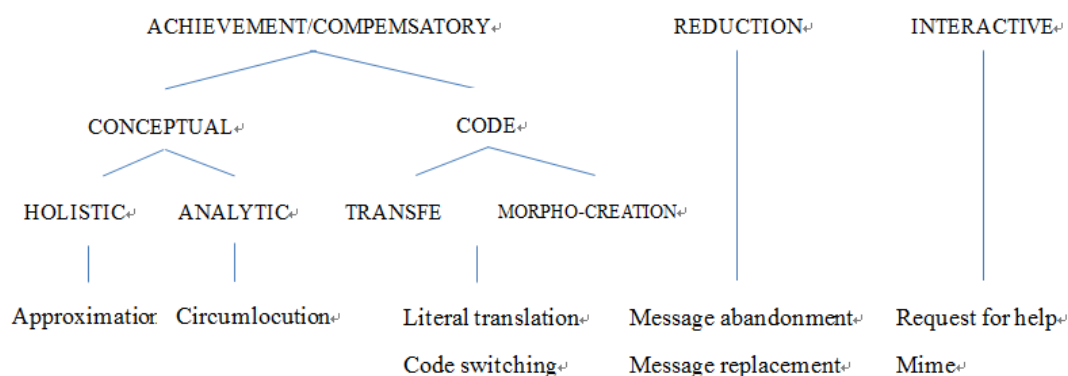
* These strategies are not sorted as compensatory strategies in this study.

⁷ The following example of 'word coinage' is cited from Dörnyei and Scott's (1997, p. 189) study. [Retrospective comment after using dejunktion and unjunktion for "street clearing":] I think I approached it in a very scientific way: from 'junk' I formed a noun and I tried to add the negative prefix "de-"; to "unjunk" is to 'clear the junk' and "unjunktion" is 'street clearing'.

The aforementioned taxonomies, which were based on these two divergent approaches, are not completely discrete. Kellerman (1991) attempted to sort some individual strategies proposed in the opposed approach into his conceptual and code strategies. He also intentionally named the code strategy to combine nonverbal means with linguistic strategies. Bialystok (1990) claimed that appealing to the interlocutors or other resources such as dictionaries for assistances can be posited in her control-based strategy. Their claims are consonant with Færch and Kasper's compensatory strategy that is divided into target or other languages based strategies (such as code-switching and inter/intralingual transfer) and interlanguage based strategies (such as generalization and word coinage) as well as cooperative strategies (such as appeal for assistance) and non-linguistic strategies (such as mime). Unlike the Nijmegen taxonomy that only addresses compensatory strategies, Færch and Kasper's taxonomy recognizes both compensatory (achievement) strategies and reduction strategies. Nevertheless, their taxonomy does not include strategies for solving problems of reception (listening comprehension) as it is based on a model of speech production. When Yule and Tarone (1997) attempted to connect two taxonomic approaches, they separated the interactive strategy from the compensatory strategy and the reduction strategy as shown in figure 3. A compensatory strategy refers to the a strategic plan to convey the intended message through manipulating either meaning or form, while an interactive strategy refers to attempts to achieve mutual comprehension such as a request for assistance or mime. Interactive strategies appear to be capable of embracing both discourse management and discourse repair due to the attempts to achieve mutual comprehension. The former is to prevent problems happening, including but not limited to checking if their speech production is comprehended by their interlocutors. The latter is to solve problems occurring in conversation such as a request for clarification to solve the problem of

listening comprehension.

Figure 3 Types of communication strategy (adapted from Yule & Tarone, 1997, p.20)



The present study aims to investigate how learners use CSs to achieve mutual comprehension effectively that is beyond strategic plans for comprehensible output; therefore, it seems appropriate to define CSs in functional terms and separate interactive strategies from compensatory strategies. A wide range of CSs are incorporated from various resources into the coding categories in this study to investigate what CSs are allowed or even promoted in an SCMC environment and what responses may follow the use of specific CSs. A great number of CSs in the coding categories are indeed adapted from Dörnyei and Scott's extended taxonomy that covers all strategies listed in Tarone's typology. Other CSs are adapted from studies such as Long's (1983) and Smith's (2003b). These CSs are functionally sorted into six groups, including three aforementioned categories (interactive strategies, compensatory strategies, and reduction strategies) and three added categories (focus-on-form strategies, sociocultural strategies, and paralinguistic strategies). Focus on form refers to how focal attentions to linguistic features are allocated when engaging in meaning-focused interaction (Long & Robinson, 1998).

Focus-on-form strategies in this study are to investigate if learners are concerned about the accuracy of language form in meaning-oriented interaction. Moreover, as sociolinguistic competence is one component of communicative competence (Canale & Swain, 1980), this study also attempts to investigate if participants use CSs for social purposes such as establishing or maintaining a positive social relationship when having socio-personal interaction with interlocutors from a different culture. Finally, paralinguistic strategies are separated from the aforementioned categories since most of them are mainly to compensate for the sensory restrictions in text-based SCMC and thus are functionally different from the other types of CSs as well as mime, the only paralinguistic strategy used exclusively in video-based SCMC. As regards individual CSs under each category, the complete list of CSs will be presented in following chapter when introducing the research methods this study undertook and then further reviewed in the chapter about the pilot study.

2.4 Research on CS Use

In addition to studies in defining, identifying, and classifying CSs as reviewed above, some studies also investigated CS use empirically. The first part of this section reviews a border set of empirical studies in CS use, while the second part focuses on use of CSs in SCMC.

2.4.1 Studies in CS Use

Whereas there has been a controversy over the validity of CS training, some studies (e.g. Dörnyei, 1995; Maleki, 2007; Rost & Ross, 1991) addressed this argument and supported the teachability of CS by demonstrating a positive effect of prior training on CS use. In the same vein, Nakatani (2005) found explicit CS training resulted in better target language performance. Learners with training tended

to use more achievement strategies and less reduction strategies compared with the control group due to an increased awareness of specific CSs they could use to improve their discourse. Nakatani (2010) further confirmed the effectiveness of the specific strategies for managing discourse and negotiation of meaning in facilitating learners' communication. Lee (2002a) also suggested teaching learners various CSs, particularly some useful and effective CSs, to improve CMC. As the present study aims to investigate various CSs used in both text-based and video-based SCMC, the results may contribute to CS training courses by not only laying out a wide range of communication strategies that can be used in SCMC but also demonstrating how these strategies may enhance the conversation.

Apart from the teachability of CSs, quite a few studies attempted to identify possible factors that might affect the use of CSs. Lafford (2004) investigated the effect of the context of learning on the use of CSs by comparing two groups of learners: "at home" classroom (AH) versus study abroad (SA). The SA group used consistently fewer CSs and tended to care less to form than the AH group. Moreover, a negative correlation was found between the frequency of CS use and the opportunities to communicate in the target language outside classroom. When Tarone (2008, 2010) accounted for interaction in SLA from either a sociolinguistic or variationist perspective, she also suggested the social setting might affect the way learners negotiate the meaning and notice target language forms. From this aspect, the tandem learning interaction, which is one area this study intends to consider, may further prepare learners for communication outside the educational setting by allowing them to have social interaction with a native speaker in a real world setting yet within the constraints of a learning context. It is worth noting that Kötter (2003) found the lack of comprehension checks in the MOO data when investigating negotiation and code-switching in online tandem between a group of German

learners and American learners. He suggested it might result from learners' fear of being overly teacher-like. The result appears to support the social constraints on CS use and also suggests the use of CSs in tandem interaction may not be the same as in other excerpt and novice (native-speaker and non-native speaker) interactions.

In the learning context, task types and conversational topics might also affect learners' use of CSs. When Smith (2003b) investigated the effect of task types, he separated compensatory strategies used to solve language problems from CSs used in problem-free discourse. There was no significant effect of the task types on the use of CSs, but the task types seemed to affect the use of compensatory strategies. Decision-making tasks yielded a higher number of compensatory strategy use than jigsaw tasks. The possible cause may be that decision-making tasks involved discussion of some specific vocabulary items, but discussion of vocabulary was not essential for the task completion of jigsaw. From this aspect, the result in Smith's study is somewhat consonant with Peterson's (2006) study in that a higher amount of negotiations were elicited in decision-making task compared with jigsaw task as well as opinion-exchange task, but different from Blake's (2000) study that found jigsaw task elicited a higher amount of negotiations than the other two tasks, namely, information-gap and decision-making. In addition, Kost (2008) found different conversational topics in the same task of role plays seemed to affect the use of CSs. More specific and restricted topics elicited fewer requests for clarifications. As regards task types and topics, more discussions will be made in the chapter of methodology when introducing the research design in this study.

Studies (e.g. Chen, 1990; Kost, 2008; Nakatani, 2006; Rost & Ross, 1991) also suggested the effect of learners' language proficiency on CS use. Chen (1990) found that the high proficiency learners often used the linguistic-based CSs (ex. metalanguage), while the low proficiency learners often used the knowledge-based

CSs (ex. exemplification). Both Nakatani's (2006) and Rost and Ross's (1991) studies indicated the relation of learners' language proficiency level to their awareness or selection of CSs. Nakatani found learners with higher proficiency use more strategies for negotiation, maintaining conversational flow, and controlling affective factors than learners with lower proficiency. Rost and Ross (1991) found learners with higher proficiency could allocate more attention to meta-cognitive strategies and they also tended to use less compensatory strategies than learners with lower proficiency. It is noteworthy that Foster & Ohta (2005) argued about the spare attention to attend to forms and suggested perhaps learners in a successful communication are able and willing to focus on form as they are not compelled to solve language problems first. They considered that maintaining a friendly and supportive discourse might be as beneficial for target language acquisition as obtaining completely comprehension, while negotiated interaction is only one type of interactions that can facilitate language acquisition. From this aspect, CSs such as input elicitation strategies, feigning understanding or even reduction strategies may facilitate the processes of target language acquisition apart from interactional modifications.

There are also studies looking at the relation of learners' first language and CS use. Dobao (2001) found there are no significant differences between Galician- and Spanish-speaking learners of English in their choice of specific types of CSs, but there was a significant difference between the two groups in frequency of CS use. Chen (1990) suggested the great language distance between English and Chinese reduced the use of first language based CSs by Chinese EFL (English as a foreign language) learners in his study. Chen also on occasion explained the use of CSs by learners' cultural background. For example, he explained the infrequency use of mime by Chinese learners of English might be affected by Chinese culture that

considers the use of many gestures impolite. Although CS use is not the main focus, Holmes (2005, 2006) also found differences between ethnic Chinese students and western students in the way they communicate with others in her studies of intercultural communication. As this study investigates use of CSs by both Chinese learners of English and English learners of Chinese, this study might help understand some language and culturally specific aspects of CS use.

2.4.2 Use of CSs in SCMC

While SCMC has gradually become an authentic communicative means in its own right, the amount of knowledge about CS use in SCMC does not seem to develop accordingly. Smith (2003b) examined communication strategy use in a text-based CMC environment and also how the use of strategies was relative to task types. His study separated compensatory strategies that were used to overcome lexical difficulties from communication strategies that were employed in problem-free discourse when navigating the tasks. Some unknown lexical items had been infused into the tasks purposely to investigate the use of compensatory strategies. Smith constructed a set of communication strategy categories by integrating communication strategies from SLA literature with some strategies exclusively used in text-based chat, and adopted compensatory strategies from one single taxonomy proposed by the Nijmegen Group. He found a wide range of communication strategies used by learners in his study and the most frequently used communication strategies were fillers, substitution (e.g. use “ic” for “I see”), framing (marks of topic shifts), and politeness, in descending order. While the highly frequent use of substitution was certainly prompted by the written nature of text-based chat, Smith (2003b) also suggested that the heavy use of framing and politeness was shaped by the features such as the absent of non-verbal aids such as

intonation or facial expressions a text-based CMC environment. With regard to compensatory strategies, he found conceptual strategies were used the most frequently, which he defined as “those whereby the participant manipulates the concept of the target referent in an effort to explain the item” (p. 34). He also found that task type may affect the use of compensatory strategies, but not communication strategies.

Kost’s (2008) study adopted Dörnyei and Scott’s taxonomy which did not separate compensatory strategies from communication strategies. Communication strategies in her study were considered as discourse management devices to maintain a conversation as well as to prevent conversational breakdown during interaction. She also found that learners in her study used a wide array of communication strategies and the most frequently used strategies were code-switching, requests for clarification, and self-repair, in descending order. Kost reported that the results of her study partially corroborate results of Lee’s (2001, 2002b) studies in that requests for clarification and self-repair were also used frequently to maintain the conversation. Nevertheless, when learners in Lee’s studies frequently requested help but only used code-switching occasionally, learners in Kost’s study never directly requested help but frequently used code-switching. Kost suggested that learners in Lee’s studies had a higher level of proficiency and less time pressure to complete a task compared with her study might be the factors caused the differences in results. In addition, Kost connected conceptual strategies, which were the most frequently used compensatory strategies in Smith’s study (2003b), to strategies of circumlocution and approximation in her study and suggested that learners with beginning-level of proficiency might be prohibited to use more elaborate strategies such as circumlocution and approximation that require higher levels of linguistic ability. It is interesting to notice the learners in Lee’s studies (2001, 200b), which were with

learners at an intermediate-level of proficiency as in Smith's study, did not use approximation frequently either, although circumlocution and other compensatory strategies were not really investigated in Lee's studies. In addition, the deliberate infusion of unknown lexical items to investigate the use of compensatory strategies in Smith's study might also affect the generalizability. From this aspect, the use of compensatory strategies is investigated in this study along with other types of communication strategies without the purposely infusion of language problems to understand how learners use different types of communication strategies in a relatively authentic communication environment.

While Kost's (2008) study was in an interactionist framework, Smith (2003b) chose an interactional approach to communication strategies and a psycholinguistic approach to compensatory strategies. As Smith restricted communication strategies to strategies used in problem-free discourse, he did not include some communication strategies that are commonly included in other taxonomies. On the other hand, when some keyboard strategies (i.e. paralinguistic strategies) used to compensate for the lack of audio and visual aids were considered effective to maintain discourse in other studies (e.g. Chun, 1994; Lee, 2001, 2002b; Smith, 2003b), these strategies were not investigated in Kost's study. Although Smith's coding of CSs does not include strategies used to solve problems have already occurred, his CSs embrace not only strategies used to prevent problems happening as in taxonomies such as Dörnyei and Scott's but also strategies used to maintain collaborative interaction or to develop the discourse when mutual comprehension is attained. Indeed, it seems to be a growing trend to investigate CSs used in problem-free discourse. Khamis (2010) specifically investigated use of four CSs, namely, hypothesis testing, forward inferencing, topic continuation, and off-task discussion, by Egyptian EFL learners in synchronous text chat with

problem-free lens. The results showed a significant difference in occurrences of use of these four CSs, which she suggested might be affected by the nature of CSs. The high frequency of topic continuation (promoters used to encourage the continuation of discourse) might be because it was the most accessible in developing discourse, while forward inferencing was the most challenging as its use involved analyzing old information and synthesizing new ideas and consequently, it was used at lower rates as hypothesis testing. When investigating learners' interaction in SCMC from a sociocultural perspective, Peterson (2009) also found the increasing use of continuers in order to maintain the interaction as the project progressed. Indeed, he also found use of other interactional management strategies apart from continuers and these strategies were possibly used in combination in order to facilitate collaborative interaction for task completion. When taking a functional approach to investigate use of CSs by Persian EFL learners in traditional face-to-face group discussions, Jamshidnejad (2011) identified three functions of CSs, which are promoting meaning transfer in communication, promoting the accuracy of language in communication, and keep the interaction going. Results showed the majority of CSs were used when meaning was clear and unproblematic. Participants tended to use CSs cooperatively to either promote the accuracy of language or keep the interaction going in a collaborative and friendly discourse. From this aspect, he suggested that more proficient learners can still benefit from second language interaction at the point that CSs enable learners to test their hypothesis or expand their knowledge to wider aspects of the language apart from to co-construct knowledge and solve problems. Along these lines, this study intends to investigate CSs used in either problem or problem-free discourse from an interactional perspective to understand use of CSs in SCMC comprehensively.

Apart from the different coding categories adopted, Smith's (2003b) and

Kost's (2008) studies also suggested the effect of text-based chat differs on the use of fillers. Smith suggested the heavy use of fillers in his study was because learners relied on these explicit signals for them to be tolerant of extended pauses in text-based CMC when the non-verbal cues were unavailable, while Kost suggested no occurrence of fillers in her study was because learners did not see each other and thus did not feel the need to signal their interlocutors that they were listening or urged to feign their understanding. Instead, they waited patiently for their interlocutors to complete the message or add some further explanation. It is only a small point of the whole study, but this study may offer support to one side of these two opposite points when exploring the differences in CS use between text-based and video-based SCMC. Indeed, Yamada and Akahori (2007) have suggested the media affected communication strategy use and reported that request for help was used largely in video-based chat while request for clarification was used more in text-based chat by the same group of learners; nevertheless, communication strategy use was not their research aim and the above finding was all they mentioned in this regard.

2.5 Summary

The reviewed literature demonstrates the significance of interaction in target language acquisition. Apart from the practical goal to have an effective interaction, the use of communication strategies that involves consciously noticing and solving language problems of expression and comprehension can probably facilitate target language acquisition. Indeed, when negotiated interaction that is triggered by negative feedback and forces learners to modify toward output comprehensibility is considered particularly effective in facilitating target language acquisition, the effect of some particular CSs is suggested. As the negotiation routines appear to be

different in text-based and video-based SCMC, this study intends to investigate if the use of CSs is also different in the two modes of SCMC.

CS taxonomies based on an interactional perspective embrace a wider range of CSs than those based on a psycholinguistic perspective. Three categories of CSs are identified by previous studies: compensatory strategies, reduction strategies, and interactional strategies. The former two types of CSs are indeed two options to cope with the problems of inadequate language knowledge when producing output, while the last type of CSs are used to prevent conversational breakdown or repair the discourse. Apart from the aforementioned categories, the other three categories of CSs are functionally separated in this study, which are focus-on-form strategies, sociocultural strategies, and paralinguistic strategies. All CSs investigated in this study will be introduced and examined in the following two chapters.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This study intends to investigate the use of CSs in both text-based and video-based SCMC and also to make a comparison between these two modes of SCMC as CS use in SCMC has not been investigated extensively yet, and studies in video-based SCMC appear to be relatively limited. The use of some particular CSs such as mime is likely certain to be affected by text-based or video-based SCMC environments due to the inherent differences; nevertheless, the differences in use of other CSs, if there is any, are less clear. In addition, this study also investigates CS use by learners of English and learners of Chinese in SCMC to understand the language and culturally specific aspects of CS use. Some paralinguistic strategies used exclusively in text-based SCMC may also be affected by the writing system of the conversational language.

While CSs in this study are viewed as communication-enhancing devices to achieve mutual comprehension and to facilitate conversation within an interactional framework, the qualitative analysis of interaction data along with questionnaires and stimulated reflections is undertaken to not only explore the use of CSs in online tandem dyadic interaction but also identify some possible reasons why particular CSs are (not) used by learners in the four SCMC settings. Despite the nature of qualitative research, the quantitative analysis is also undertaken to provide an overview of the relative frequencies of the occurrence of the different strategies and to understand their distribution in the different conditions. In addition, a MANOVA is applied to understand to what extent the differences are likely to have occurred by chance, even with a small sample.

Unlike the previous studies mainly investigated CS use in one type of

SCMC setting, this study intends to investigate CS use in four types of SCMC settings (operation of the two target languages and the two modes of SCMC) to understand the similarities and differences between text-based and video-based SCMC as well as between the two conversational languages, English and Chinese. As the investigation covers the two modes of SCMC and the two conversational languages, there are some challenges which need to be overcome. When there is a connection between turn taking and CS use, it is a challenge to make the different turn taking systems of text-based and video-based SCMC comparable in order to make a valid comparison of CS use between these two modes of SCMC. In addition, although most CSs in the coding categories are probably applicable to the four types of interactions, it is important to clearly mark any CSs that can only be used in one particular mode of SCMC or in one particular conversational language.

The present chapter together with the following chapter aims to introduce and review the research method through which this study was undertaken and also the solutions adopted to various challenges which occurred in the process of data collection and analysis. The present chapter covers the selection of SCMC tools as well as the description of participants, procedure of participation, the tasks, and stimulated recalls. The coding categories and the analytic method are also introduced in the present chapter. Then, the following chapter will further clarify all CSs in the coding categories through the data in the pilot study, and address the different turn taking structure in text-based and video-based SCMC to ensure the comparability and to describe a fair scheme to quantify the use of CSs in various turn units.

3.2 Communication Tools

For gathering data, MSN Messenger was chosen as the means of text-based SCMC and Skype was chosen as the means of video-based SCMC in the present

study. Both are free yet stable SCMC tools available for learners to practice the target language with native speakers of the target language without any constraints of location. Moreover, these two SCMC tools do not require specific training before using. It is noted that although most participants had experience of SCMC for years, some of them were used to utilizing either MSN Messenger or Skype for both text-based and video-based SCMC as either of them alone can support both modes of SCMC. Therefore, corresponding MSN Messenger to text-based interaction and Skype to video-based interaction might reduce the possible effect of prior experience as participants were at least familiar with one tool. Moreover, the separation appeared to help participants be more aware of the target medium (mode) they should use for each task.

3.3 Participants

The qualitative analysis of four types of online interactions of the same group of participants in this study precludes the use of a large sample; nevertheless, the sample size in this study is still at the acceptable lower limit for MANOVA (Guilford & Frunchter, 1978) particularly as it is used in this study to indicate to what extent the differences of the occurrence of CSs between the two modes of SCMC and between the two conversational languages are likely to have occurred by chance. Although a total of fourteen participants would only detect a very large effect size at the 0.8 power level ($\alpha = .05$), the sample size is usually regarded as sufficient as this study does not intend to make any claims about the representativeness of the sample.

As tandem learning interaction can preserve the positive learning conditions constructed in communication between native speakers and non-native speakers as described in previous studies of interaction and at the same time encourage learners'

production by balancing the power between interlocutors, tandem learning interaction in SCMC is also one key feature this study intends to address. Therefore, Chinese-speaking learners of English and English-speaking learners of Chinese were recruited and paired up as tandem learning dyads. All participants took turns to be learners and language experts, but their performance would only be investigated when they played the role of a learner. Each dyad were required to interact with each other in the four SCMC settings to allow the comparisons of learners' use of CSs between the two modes of SCMC and between the two target languages.

A total of fourteen participants formed seven tandem learning dyads between learners of English whose first language is Chinese and learners of Chinese whose first language is English. All learners of English were English majors at universities in Taiwan and all learners of Chinese were Chinese majors at universities in either United Kingdom or Ireland when they participated in this study. Participants were asked to fill out a background information questionnaire prior to the experimental online interactions. The profile of participants is summarized in the table 1 below.

Table 1 Profile of participants

	Learners of English ($N = 7$)	Learners of Chinese ($N = 7$)
Gender	1 male; 6 females	2 males; 5 females
Age	18-23 (Mean = 20.29)	20-29 (Mean = 22.57)
Years at University	1-3	2-4

As language proficiency levels might affect the use of CSs according to the reviewed literature in the previous chapter, second and third-year undergraduates majoring in English/Chinese were targeted for the recruitment. Nevertheless, such restriction had to be relaxed due to the challenge of recruiting voluntary participants

and thereby one first-year English major and two fourth-year Chinese majors were allowed to participate in this study. Despite all majoring in English/Chinese at universities, learners of English and learners of Chinese indeed had different prior learning experience. All learners of English had six years of mandatory English language education in high school and some of them had learned English beforehand, while no learner of Chinese had learned Chinese before attending university. The mean years of learning the target languages, including learning at universities, are 10.29 and 2.57 respectively. On the other hand, while six out of seven learners of Chinese had studied or were studying in Chinese speaking countries when they participated in this study, all learners of English had no experience of studying in English speaking countries. Overall, most learners of English appeared to be at higher level of proficiency in the target language than learners of Chinese according to their performances in the online interactions.

Except for different levels of language proficiency, the two groups of learners were similar in terms of ages and computer skills. Lee (2004) found differences in proficiency levels, ages, and computer skills might linguistically and socially affect the quality of online negotiation. Learners in Lee's study praised the positive learning condition of being exposed to authentic language discourse offered by native speakers during online interaction, but they also admitted that their self-confidence was affected by their inferior language proficiency. As social interaction with native speakers or a more competent interlocutor is considered beneficial for SLA according to the interaction hypotheses, learners should not be over-protected from interaction with native speakers. Instead, the use of CSs such as interactional modifications or eliciting scaffolding assistance should be encouraged to overcome the gap caused by different proficiency levels. Moreover, the intimidation feeling reported in Lee's study might not simply result from different

proficiency levels. Some learners reported that they were intimidated by their authoritative interlocutors who were not only native speakers but also teachers of the target language in secondary schools. At this point, the tandem learning design in the present study might reduce such intimidation by providing all participants with equal opportunities of being language experts in turn. In addition, learners in Lee's study also reported that they had not much in common to chat with their interlocutors who were their seniors by decades. Such a problem was also prevented in the present study as most participants were in their early twenties. Moreover, all of them were undergraduates and participated voluntarily in the present study with the common interest in knowing the target language and culture. The similarities might further motivate participants to actively interact with their peers. As regards the computer skills, all participants in this study were familiar with using computers for university assignments and emails, and most of them had access to SCMC daily prior to participation in this study. Besides, the possible effect would be further mitigated by allowing participants to get acquainted with the two SCMC tools in a trial session prior to the experimental interactions.

3.4 Research Design

For the purposes of this study, all participants were required to take part in four types of SCMC. The routines of participation as well as the tasks involved in online interactions are introduced in the following. In addition, although CSs are the attempts for mutual comprehensions and seem valid to be investigated according to their functions in conversational discourse, the cognitive processes involved in CS use should also be taken into account since the use of CSs is a social and cognitive activity. From this aspect, all participants were required to fill out an after-task questionnaire to reveal their perceptions of CS use and two dyads were asked to

provide stimulated reflections on their concurrent cognitive processes when interacting with their tandem learning partners to validate the results of conversation analysis. The design of the after-task questionnaire and stimulated reflections will be introduced and reviewed in the last part of this section.

3.4.1 Procedure

Apart from the background information and after-task questionnaires, all participants were required to take part in four different interactions to fulfill the empirical design: synchronous text-based interaction in English, synchronous text-based interaction in Chinese, synchronous video-based interaction in English, and synchronous video-based interaction in Chinese. Learners of English and learners of Chinese were paired up to form tandem learning dyads for experimental interactions. The duration of each interaction was around 30 minutes and participants were assigned to communicate in one language only for each interaction to maintain a target language learning environment and a settled relationship between a learner and a more competent interlocutor. Prior to the four experimental interactions, participants had one trial interaction to get acquainted with their tandem learning partners and the two SCMC tools. As the trial interaction was not for analysis purposes, it was the only exception that the two target languages could be used interchangeably.

All the online interactions were saved in the participants' personal computers and then sent to the researcher electronically. MSN messenger has an inbuilt function to save the text-based chat log and the software "Supertintin the Skype Recorder" has to be installed in order to record video-based interaction. A manual was given to each participant to explain how to record SCMC interactions and the researcher was also available for online help during the trial interaction.

Although all dyads were required to have four experimental interactions, the routines of participation were not all the same. Dyads were divided into two groups randomly. One group started with synchronous text-based interaction and then switched to synchronous video-based interaction, while another group proceeded the other way around. The rationale of two groups switching design is to allow participants' recall of their communication strategy use with both media and also to take novelty as a variable into account (Hubbard, 2005). As English is often used to communicate with native speakers of different languages and participants might feel more comfortable to communicate with each other in English, all dyads were asked to start with interaction in English and then interaction in Chinese for each medium. The presumed preference of English was confirmed by the after-task questionnaire, in which participants reported that they generally communicated in English when chatting after tasks.

3.4.2 Tasks

Various communicative tasks have been designed for SLA research and pedagogical analysis based on the theoretical claim that language is best learned and taught through social interaction. As input comprehensibility, feedback, and modified production are three needs for learning through social interaction, Pica, Kanagy and Falodun (1993) summarized four task features to indicate opportunities for the three needs. The four parameters are: (1) required versus optional information exchange, (2) one-way versus two-way interaction relationship, (3) convergent versus divergent goal orientation, and (4) closed versus open outcome expected. They delineated the most facilitative task type for SLA should require learners actively participate in two-way information exchange for convergent goals with only one acceptable outcome. Accordingly, a jigsaw task was suggested the most facilitative for SLA

followed by information gap, problem-solving, decision-making and opinion exchange in the descending order. Although both Smith's (2003b) and Peterson's (2006) empirical studies found decision-making task elicited a higher amount of negotiation than a jigsaw task, their findings did not seem to militate against the four parameters completely. According to Pica et al. (1993), two-way interaction is not required, although it is often elicited, in decision-making task. At this point, a jigsaw task appears to be superior as it requires a two-way information exchange to complete the task. While discussion of some specific vocabulary items was required by decision-making tasks but not jigsaw in Smith's study, the result seemed to re-confirm the claim that two-way interaction is more effective than one-way interaction in terms of promoting negotiated interaction. In addition, despite fewer amount of repair negotiations, Nakahama, Tyler and Lier (2001) found that a relatively unstructured conversational activity might have greater potential for SLA than highly structured activity such as an information gap task due to the greater opportunities for learners to produce complex utterances and demonstrate their pragmatic knowledge. Learners in their study also reported in the retrospective interview that the conversational activity was more challenging as they had to pay close attention to the context of their interlocutors' talk as well as the discussed topics, while they mainly focused on lexical items in the information gap activity.

As an effective task for SLA appears to involve learners' active participation in two-way conversational interaction, topic-based open-ended questions were designed toward this goal in the present study. Indeed, such task type has been found effective in Lee's (2002a) study already. The single task type was applied to all experimental interactions to avoid possible task type effect when comparing the use of CSs in the two modes of SCMC and in the two target languages, but different topics were selected to avoid practice effect or boredom. The selected topics (as

shown in table 2 below) were meant to encourage participants to share and exchange information relevant to their life experiences and a set of open-ended questions based on each selected topic were to provide assistance in this regard. Moreover, meaningful two-way exchange might also be encouraged in these conversational interactions due to a common interest in the target cultures. A work sheet showing the assigned topic along with a set of relevant questions was given to participants for each interaction.

Table 2 Conversation topics

Communication Medium	Target Language	Topic
Text-based SCMC	English	Local Delicacies
Text-based SCMC	Chinese	旅遊 (Travel)
Video-based SCMC	English	Leisure Activities
Video-based SCMC	Chinese	節慶 (Festivals)

3.4.3 After-task Questionnaire and Stimulated Reflection

CS studies in an interactional approach and in a psycholinguistic approach tend to adopt different research methods to satisfy the divergent analytic preferences. While studies in an interactional framework often investigate the use of CSs in interaction data, studies in a psycholinguistic framework often use introspective reports to reveal the cognitive processes involved in CS use. While these two approaches indeed view the same phenomena from different perspectives, interaction data together with learners' reflection may provide a relatively complete picture of CS use. Indeed, Kasper and Kellerman (1997) also suggested gathering some supportive information from retrospective reports when they found that less control over the participants' output by the researchers in authentic conversations might cause more difficulty to track down the use of CSs in such conversations. Besides,

some CSs such as feigning understanding are naturally difficult to identify in interaction data. As it is intended for covert use, more successful examples of feigning understanding are more difficult to identify in conversation. At this point, the introspective reports by participants should help validate the coding. Therefore, although interaction data were the main source to investigate the use of CSs in this study, an after-task questionnaire and stimulated reflection were also employed to reveal learners' conceptions of CS use and their cognitive processes involved in CS use to support and enrich the analysis of interaction data.

To reveal participants' concurrent cognitive processes during interactions, their produced interactions are provided to stimulate the recall of these processes. Gass and Mackey (2000) explained that "the theoretical foundation for stimulated recall relies on an information-processing approach whereby the use of and access to memory structures is enhanced, if not guaranteed, by a prompt that aids in the recall of information (p. 17)". In this study, native speakers of English and native speakers of Chinese were paired to form tandem learning dyads: they were learning their peer's first language as a target language. Each participant interacted in their first language and in their learned language respectively in both text-based and video-based SCMC. Since the focus of this study is on CS use by language learners in the two modes of SCMC, participants were required to review their text-based and video-based interactions done in their learned language only, but not in their first language. Besides, to avoid overwhelming participants and make the recall more productive, they would only review one segment for each target interaction instead of the entire interaction.

Stimulated recall has been employed widely as a research method, but its potential limitations should not be ignored. Ericsson and Simon (in Poulisse, Bongaerts & Kellerman, 1987) suggested that the recall should be done right after

the task completed or memory might decay over time. This study requiring dyad interaction in text-based and video-based SCMC respectively is to compare the use of CSs in the two modes of SCMC. Since the primary research method is conversation analysis, the priority should be obviating any possibilities that could affect participants' performance in conversation. At this point, reflection would only be conducted after all tasks were completed in order to avoid any possible effect on the performance of the following tasks. Moreover, as the stimulated recall was to help clarify coding in this study, the primary analysis should be done and the stimulated segment, which cover the use of these CSs, need to be selected prior to the recall. To compromise between the research need and as valid a result as possible, the recall was done within a week after the last task completed.

Delayed recall is often questioned in terms of the less accurate memory over time. Nevertheless, immediate recall seems unable to reconstitute the situational meaning in recent interaction either. As the conversational nature in this study does not permit participants to think aloud when participating in interactions, stimulated recall appears to be a good option. It is noted that the stimulated video/ text itself might become a new source for participants to reflect on (Yinger, 1986, as in Lyle, 2003) and participants might report their current thinking when viewing video/text instead of the concurrent thoughts when they participated in conversation. When watching the recorded interaction, one learner of Chinese noticed his high frequent use of “欸 (yeah)” in his peer's turn space. He expressed his concern in this regard. He was told by one lecturer from Beijing to avoid such “bad behavior”, but this habit seemed to be reinforced when studying in Taiwan. There seems to be a divergence of view on this particular behavior between the lecturer from China and his Taiwanese friends who are native speakers of Chinese. Indeed, short reactions in the peer's turn have been viewed as a continuation signal by studies such as Schegloff's (1981).

Although this learners' reflection is obviously not the recall of concurrent thoughts when participating in interaction, it reveals the learner's insight of using input elicitation strategies. It is interesting that other participants who had similar behaviors during interaction seemed to reckon them as natural (automatic) reactions and did not reflect on this regard specifically. Dörnyei and Scott (1995, in Dörnyei & Scott, 1997) claimed that automatized strategies could still be considered as CSs, but the cognitive processes of the automatized strategies seemed to be naturally difficult to trace back, regardless of delayed or immediate recall. Moreover, although learners in this study might be uncertain about why they did so when watching the stimulus, they often attempted to explain their behaviors with the benefit of hindsight. The finding is consonant with Yinger (1986, in Lyle, 2003) who notes that participants might attempt to elaborate the reasons for their interpretation of the reviewed context. Indeed, it seems more reasonable to call this process stimulated reflection instead of stimulated recall in this study since the result is strong in revealing participants' insight of CSs in general rather than their concurrent thoughts when participating in interaction.

It was a challenge to conduct stimulated reflection through Skype when the researcher had very limited control on the review pace. Since tandem learning partners and the researcher were all based in different cities/countries when they participated in this study, it was practically difficult to reach them in person shortly after the last online interaction completed. Therefore, participants were asked to report their reflection verbally through Skype (video-conferencing) and the whole process was recorded on the researcher's computer by "Supertintin the Skype Recorder". The procedure of stimulated reflection is divided into two phases from less focus to more focus on particular CSs. In the first phase, participants were asked to recall their concurrent thoughts when doing interactions without any interruption

from the researcher. Such a design was not only to solve the problem of no control over the review pace on the researcher side since the stimulus (video and text) were actually playing on participants' computer screen, but also to prevent participants sensing anything from the researcher's interaction and responding to their talk in a positive or negative light. As participants gave verbal reports in their first language, they generally started with clarifying their intended messages in their first language and then pointed out the problems they encountered along with the solutions they could think of when communicating in the target language. By doing this, the cognitive processes of using CSs to solve language problems of comprehension and expression appeared to be revealed. Nevertheless, as no instruction was given in this phase, participants tended to overlook the CSs used automatically and sometimes were distracted by the attempt at commenting their own performance. Therefore, in the second phase, participants were asked to recall some specific turns pointed out by the researcher to help clarify some problematic CSs. Although participants were directed to reflect on some particular turns, leading questions were still carefully avoided to prevent researcher's bias (Ericsson and Simon, 1993) and some pre-selected turns might be skipped if they had already been addressed in the first phase.

Overall, the results of the after-task questionnaire and stimulated reflection show that most participants could have a global (discourse) level of understanding and they tended to tolerate some ambiguous parts as the overall meaning and the flow of conversation were the main priority for them. The details of participants' conceptions of particular CSs will be discussed along with the results of conversation analysis when presenting the results of this study.

3.5 The Coding Categories of Communication Strategies

From an interactional perspective, the coding categories embrace a wide range of CSs used in either problem or problem-free discourse to investigate the use of CSs in SCMC more comprehensively. A great number of CSs are indeed adapted from Dörnyei and Scott's taxonomy (1997) that is one of the most comprehensive and influential taxonomies to date. While their taxonomy was proposed to address various communication problems occurring in face to face communication and classified according to the three ways of problem management (direct, indirect, and interactional) pertaining in the four types of problems (resource deficit-related, own-performance problem-related, other-performance problem-related, and processing time pressure-related), other CSs, especially those used specifically in SCMC and those used to facilitate problem-free discourse, are combined with previous studies such as Smith's (2003b) to provide a more comprehensive CS coding scheme for SCMC. Despite extending the scope to embrace more types of CSs, the coding categories in this study intend to avoid profligate expansion by integrating functionally similar CSs. For example, time gaining strategies in this study include use of fillers and repetitions in Dörnyei and Scott's taxonomy. Indeed, it is problematic to define repetitions as a strategy when not all repetitions carry the same function. The function of this strategy is clear in Dörnyei and Scott's taxonomy only because it is situated in a 3 (ways of problem management)-by-4 (types of communication problems) matrix. Besides, learners in this study explicitly asked for more processing time on occasion during interaction apart from the use of fillers or repetitions. The example also demonstrates the need to define CSs in functional terms to embrace various expressions in active conversation.

To help understand how various CSs facilitate interaction, all CSs investigated in this study are further grouped into categories in terms of their

functions. From an interactive perspective, CSs are defined as mutual attempts to attain agreed meaning between interlocutors (Tarone, 1980). That is, apart from compensatory strategies and reduction strategies reflecting the two divergent approaches to solve language problems of expressions, interactional strategies used to repair and manage discourse are also one type of CSs to facilitate mutual comprehension. It is noted that compensatory strategies in this study are limited to strategies used to compensate for the restricted target language resources through manipulating available language knowledge to avoid the overlaps with interactional strategies and paralinguistic strategies. Therefore, the scope of compensatory strategies in this study is narrower than in Færch and Kasper's (1983b) and the Nijmegen's (Kellerman, 1991) taxonomies. In addition to these three categories, focus-on-form strategies and sociocultural strategies are also identified in this study to reflect different dimensions of learners' use of CSs. Focus-on-form strategies are used to ensure the accuracy of the target language use. As noticing is essential for target language acquisition (Schmidt, 1990), the use of these strategies often indicates the target-like language forms learners noticed and thereby imply the possibility of acquisition. Sociocultural strategies are mainly to sustain a collaborative social interaction. This category should not be overlooked in the CS coding categories, when sociocultural competence has been considered as one component of communicative competence (Canale & Swain, 1980; Canale, 1983). Paralinguistic strategies are separated from the aforementioned categories as most of them are used specifically in text-based interaction and functionally different from the paralinguistic strategy (i.e. mime) recognized in the previous studies. The following will introduce individual CSs under these six categories.

(1) Interactional Strategies

CSs used to manage or repair conversational discourse are grouped as interactional strategies in this study. Some strategies such as time-gaining strategies and verbal strategies markers that do not request immediate responses from interlocutors are also considered as interactional strategies since these strategies can functionally prevent communication problems that may cause conversational breakdown. The twelve interactional strategies identified in this study are presented in the following.

- *Request for Clarification*: Asking for explanation of unfamiliar terms or messages.
- *Confirmation Check*: Repeating the trigger in a rising intonation to ensure one heard something correctly, or using a first language term or asking a full question to ensure the correctness of the input comprehension.
- *Comprehension Check*: Asking questions to ensure one's messages are understood.
- *Direct Request for Help*: Asking for assistance by an explicit question concerning a gap of one's knowledge in the target language.
- *Indirect Request for Help*: Trying to elicit help from one's interlocutor by indicating the problems either verbally or nonverbally.
- *Input Elicitation Strategies*: Expressing explicitly or passing signals to encourage one's interlocutor to continue talking.
- *Feigning Understanding*: Pretending to understand the preceding message in order to carry on the conversation.
- *Inferential Strategies*: Asking questions or making comments based on established information to test one's hypothesis of the preceding message, show one's current state of understanding, or gain new information.

- *Framing*: Marking the shifts of topics.
- *Verbal Strategy Markers*: Using verbal marking phrases such as “you know” or “kind of” to indicate the use of strategy or less accurate form in the target language.
- *Omission*: Leaving an unknown word as a gap and carrying on as if it has been said with the hope that the interlocutor can fill the gap by context.
- *Time-gaining Strategies*: Using fillers such as “umm...” or repeating interlocutor’s words to fill pauses in order to maintain conversation at times of thinking.

(2) Compensatory Strategies

Compensatory strategies are to compensate for inadequate target language ability through manipulating available target language knowledge. They are more production oriented compared with interactional strategies. This study identifies five compensatory strategies as described below.

- *Circumlocution*: Exemplifying, illustrating, or describing the features of the target object or action.
- *Approximation*: Using one single substitute term with which the target term shares semantic features.
- *Use of All-purpose Words*: Using a general “empty” lexical term to replace a specific term to compensate for vocabulary deficiency or to avoid making mistakes.
- *Literal Translation*: Translating a first language term literally to a target language term.
- *Self-rephrasing*: Paraphrasing, restructuring, or repeating one’s own utterance. Sometimes new information may be added to the repetition.

(3) Reduction Strategies

Reduction strategies can be used to avoid making mistakes and get rid of being embarrassed. The two reduction strategies identified in this study are presented below.

- *Message Abandonment*: Leaving a message unfinished due to an inability to cope with language difficulty.
- *Message Replacement*: Replacing the original message by a new one when feeling incapable of executing it.

(4) Focus-on-form Strategies

Focus-on-form strategies are to ensure the accuracy of the target language use. Three focus-on-form strategies identified in this study are presented below.

- *Self-correction*: Making self-initiated corrections.
- *Meta-talk*: Using the target language to reflect on one's own or interlocutor's use of the target language.
- *Own Accuracy Check*: Checking the correctness of one's own expression by asking a concrete question or repeating a word with a rising intonation (or a question mark in text).

(5) Sociocultural Strategies

Sociocultural strategies are mainly to sustain a collaborative social interaction between interlocutors who are from either the same or different cultural backgrounds. Two sociocultural strategies identified in this study are introduced in the following.

- *Social Formula*: Using fixed patterns for social purposes such as greetings, leave takings, or apology.

- *Code-switching*: Using first language words in the target language speech for purposes such as to show familiarity or to negotiate or establish intersubjectivity.

(6) Paralinguistic Strategies

Paralinguistic strategies in this study are used exclusively in either text-based or video-based interaction and their functions differ accordingly. Mime is the only paralinguistic strategy used exclusively in video-based SCMC to help deliver the intended message. The others are used exclusively in text-based SCMC mainly to compensate for the restrictions of the communication medium itself and sometimes to avoid mistakes. The five paralinguistic strategies are described below.

- *Mime*: Using all kinds of nonverbal aids such as gestures to help delivering intended messages.
- *Use of Text to Display the Effects of Intonation*: Capitalizing words for stress (ex. AMAZING) or multiplying letters (ex. Sooooo cute) for extended sounds¹.
- *Use of Emoticons*: Using emoticons (ex. 😊) or keyboard symbols (ex. ^__^) to display facial expressions and emotional states.
- *Punctuation*: Using punctuation extensively such as using a question mark to indicate a rising intonation or using it alone to show a confused state, using exclamation to express surprise, or using ellipsis points to indicate the intention to shift turns or topics or to mean “no comment”.
- *Substitution*: Using abbreviated form of a word (ex. u for you) or a phrase (ex. LOL for laugh out loud) to save typing time or to avoid mistakes.

¹ The descriptions of this strategy as well as the strategy of substitution probably need to be adjusted with the conversational language when capitalizing words and multiplying letters are apparently not applicable in ideographical languages such as Chinese.

As CSs in the above coding categories are mainly identified from research in face to face communication and in learning English as a target language, a pilot study was undertaken to verify the applicability of the coding categories to the investigation of CS use in the two target languages (English and Chinese) and in the two modes of SCMC (text-based and video-based). Moreover, the data collected in the pilot study were also used to further clarify individual CSs in the coding categories, especially some were problematic to identify. The clarification of individual CSs will be presented in the following chapter with examples excerpted from the pilot study, but two adjustments that have been made in the coding categories presented above are explained here. The first revision is sorting code switching as a sociocultural strategy instead of a compensatory strategy. Darhower (2002) found that use of first language could be an efficient strategy to maintain a target language conversation between learners from the same first language background due to less effort in need to explain one unfamiliar word in the target language. A similar effect of first language use was expected in this study since all participants were learning their interlocutors' first language as the target language. Nevertheless, most instances of first language use in the pilot study did not seem to compensate for the inadequate target language resources. One Taiwanese interlocutor used the term “夜唱” when introducing one of the most popular leisure activities among Taiwanese university students. She soon explained this term in English, “...people go to the KTV and singing all the night”. The English equivalent of “夜” is “night” and “唱” is “sing”. This instance of first language use seems to result from the concern that a direct translation of “singing at night” might not precisely reflect the original concept and its corresponding sub-culture of Taiwanese university students². Other instances also show that participants tended to use a first language

² KTV is where people sing with their friends in a private room, which is different from karaoke

term to introduce something which originated in their native culture rather than using translated terms and their attempts sometimes seemed to elicit sympathy from their interlocutors if their interlocutors had previously known the mentioned terms. As it was a tandem learning relationship, learners were keen to introduce a couple of first language terms to their partners when communicating in the target language. Accordingly, code switching under the category of sociocultural strategies appears to be more appropriate than the use of first language under the category of compensatory strategies in this study.

In addition, it has to be noted that not every time a first language term is used can be coded as one instance of code switching use. The coding is supposed to be determined by its function rather than form. The point is illustrated with excerpt 1 below. The use of “臭豆腐” rather than ‘stinky tofu’ in an English speech as shown in line 1 appears to be an example of code-switching. As the learner of Chinese (LC) has showed her knowledge of Taiwanese food in the previous turn, the use of “臭豆腐” by LE might be to form a social discourse with a familiarity rather than to compensate for the language difficulty. On the other hand, although the use of “优酪乳 (yogurt drink)” at line 13 did not seem to result from the language difficulties either, the function to confirm a mutual comprehension appears to be more salient compared with establishing a social relationship. Although Yakult is very popular in Taiwan, it is often known as “養樂多 (yǎng lè duō)”, its translated name, by most Taiwanese people, including the LE. Therefore, a negotiation was triggered by the request for clarification from the LE in turn 5. Sequentially, the expression “优酪乳?” as shown in turn 7 appears to confirm the mutual comprehension and it should be coded as the use of confirmation check rather than the use of code switching.

where people sing in a rather public space. In Taiwan, many KTVs offer promotion after midnight, so students generally go there at late nights to save budget.

Excerpt 1: Text-based SCMC in English

<Turn 1> LE: Do you know 臭豆腐?	1
<2 turns in between>	
<Turn 4> LC: I usually like to keep an open mind about food, but I can't even get close enough	2
to it to try it, haha	3
LC: I heard it's really good for you though	4
LC: the bacteria are good for your gut which is then good for your skin,	5
or something like that	6
LC: kind of like eating Yakult	7
<Turn 5> LE: Yakult?	8
<Turn 6> LC: hmmm, I don't know how to say it in Chinese... it's that health drink that	9
comes from Japan, in those little bottles, it looks a bit like milk?	10
LC: you are supposed to drink one a day?	11
<Turn 7> LE: sounds magical...	12
LE: 优酪乳?	13

Another revision involves excluding the use of polite, direct, and rude tones from the coding categories since participants in this study admitted that their use of tone might not always reflect their intention. Although they intended to be polite, they might sometimes miss the goal as they had a hard time being aware of the cultural norms of politeness. At this point, it seems invalid to code the use of polite, direct, or rude tone according to the performance. Besides, quite a few examples of use of polite tone seemed to overlap with the use of social formula. As the distinction of these two strategies appears to be blurred, merging the strategy of using polite tone into the strategy of using social formula seems to be a practical solution. That is, although this study does not intend to code the use of different tones, the use of polite tone is largely coded as the use of social formula in this study.

3.6 Data Treatment and Analyses

To investigate learners' use of CSs in the four SCMC settings, performance

data were collected from the four types of interactions, which were operated the two modes of SCMC and the two conversational languages as shown in table 3. All interactions would be transcribed into text, and the coding categories presented above are applied to code the use of CSs in these interactions.

Table 3 The four SCMC settings by operation of the two modes of SCMC and the two target languages

	Text-based SCMC	Video-based SCMC
English	(1) Text-based Interaction in English	(3) Video-based Interaction in English
Chinese	(2) Text-based Interaction in Chinese	(4) Video-based Interaction in Chinese

When the scripts collected from text-based chat logs were almost ready for analysis, the software Transana that allowed observing both sides of interlocutors simultaneously as seen in figure 4 was utilized to transcribe video data into text. When transcribing the videos, the conventional punctuation such as commas, periods, and question marks were used to ensure its comparability with text-based chat logs; nevertheless, some transcript symbols were selected or adapted from “Jefersonian Transcription Notation³” to depict some features that do not appear in text chats. The selected transcript symbols are shown in table 4 below.

³ It is as seen in Transana online help website (<http://www.transana.org/support/onlinehelp/team1/transcriptnotation1.html>).

Figure 4 Screen capture of Transana⁴

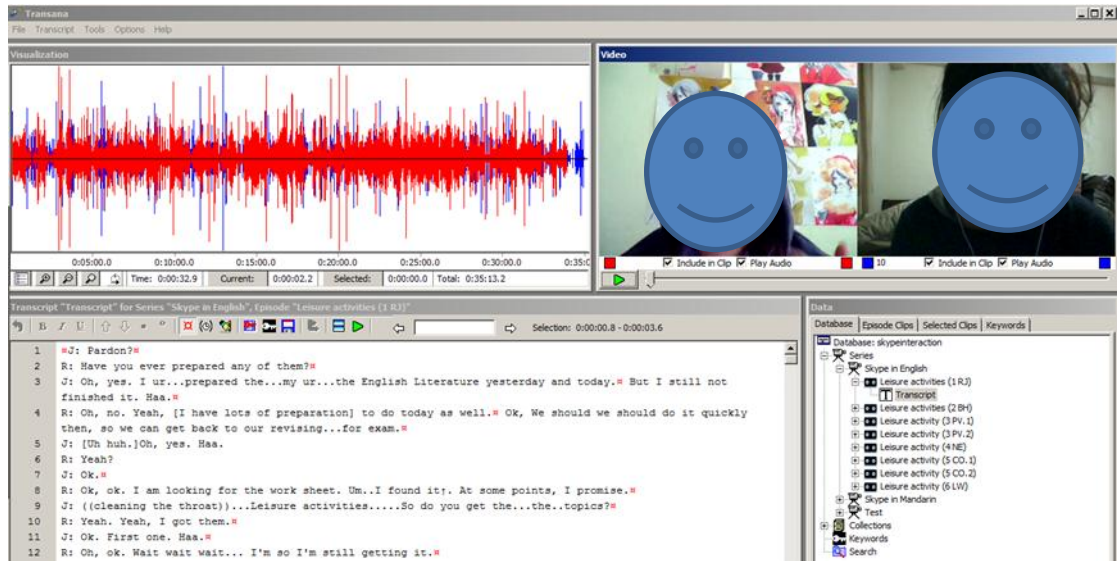


Table 4 Transcript Symbols

Symbol	Name	Use
[text]	Brackets	Marks overlapping speech.
(.)	Micropause	Indicates a brief pause.
↑ ↓	Up or Down Arrow	Indicates rising or falling intonation.
:::	Colons	Indicates prolongation of a sound.
((<i>italic text</i>))	Double Parenthesis	Describes non-verbal activities

* (.) is used exclusively for a pause in related fluency speech. As learners often pause or rephrase due to the deficit language resources, ellipsis points “...” are used largely to represent such fragment speech.

As comparing the use of CSs in text-based and video-based SCMC is also an important part of study body, the text chat scripts and the transcriptions of video data have to be consistent for valid comparison. Nevertheless, the need is challenged by the different turn taking systems inhered in text-based and video-based interaction. To illustrate with examples, the treatment for making the different turn taking systems of text-based and video-based SCMC comparable will be discussed when reviewing the pilot study in the following chapter (further examples are provided in Appendix D).

⁴ To keep the real identity of participants anonymous, their faces are covered with smiley faces.

The qualitative analysis of interaction data along with learners' reflections was undertaken to understand how CSs are employed and function in online tandem dyadic interactions and also to identify some possible reasons why they are (not) preferred by learners in the different SCMC setting. With guidance from a comprehensive set of coding categories, each occurrence of CS use in this study is indeed identified by taking the form, the function, and the pragmatic intent of learners all into consideration. While the qualitative analysis is the main focus of this study, the quantitative analysis aims to provide an overview of the relative frequencies of the occurrence of the different strategies and to understand their distribution in the different conditions. The three research questions actually involve two levels of investigation. Based on the investigation pertaining to the first question about the use of CSs in the four SCMC settings, both the qualitative and quantitative results are compared to explore the differences between the two modes of SCMC and between the two conversational languages. A MANOVA was used in this analysis to indicate to what extent the differences are likely to have occurred by chance, and this helped to guide the qualitative analysis, both to check the coding by indicating their relative frequencies and indicating areas for further qualitative analysis.

3.7 Summary

This chapter has discussed the research method of this study. The participants and the research design, including the procedures and the tasks, were described and justified along with the solutions to challenges occurred in the stage of collecting data. The CS coding categories and the analytic method to answer the three research questions were also introduced in this chapter. The following chapter will continue to clarify individual CSs in the coding categories through the data

collected in the pilot study and also address the different turn taking systems in text-based and video-based SCMC to ensure the comparability.

CHAPTER FOUR: THE PILOT STUDY

4.1 Introduction

This chapter aims to review the research method outlined in the previous chapter through the results of the pilot study. All CSs identified in this study are carefully clarified and then an inventory of CSs showing examples, relevant literature, and a check list of practicability in text-based and video-based SCMC is provided as a summary of these clarifications and discussions. In addition, as a turn is a basic unit when investigating CS use in this study, the different turn taking structure in text-based and video-based SCMC are also clarified in this chapter to ensure the comparability and to describe a fair scheme to quantify the use of CSs in various turn units.

4.2 Classification and Clarification of CSs

The CS coding categories in this study embrace a wide range of strategies used to achieve mutual comprehension and to facilitate the communication. These CSs are grouped into five categories, namely, interactional strategies, compensatory strategies, reduction strategies, focus-on-form strategies, and sociocultural strategies, in terms of their functions. In addition, paralinguistic strategies are grouped independently from the aforementioned five categories when their functions in text-based and in video-based SCMC are not identical. Indeed, except for mime that can only be used in video-based SCMC, all paralinguistic strategies identified in this study can only be used in text-based SCMC. The strategy of mime is often used to compensate for a vocabulary deficiency, while the paralinguistic strategies used exclusively in text-based SCMC are mainly to compensate for the restrictions of the communication medium itself and sometimes may be used to avoid mistakes. It is

noted that as the coding of this category appears to be completely discrete in text-based and video-based SCMC, the comparison of use of paralinguistic strategies will only be made between the two target languages, but not between the two modes of SCMC. This section aims to discuss all individual CSs and clarify some problematic CSs with examples excerpted from the pilot study according to the aforementioned six categories.

4.2.1 Interactional Strategies

From an interactional perspective, CSs are often viewed as means to reach mutual comprehension between interlocutors and to facilitate interaction through either interactional modifications or discourse management (Long, 1983; Tarone, 1980). Accordingly, the twelve interactional strategies investigated in this study include both repair mechanisms used to negotiate for mutual comprehension and discourse management devices used to prevent communicative breakdown or to promote conversation development.

Requests for Clarification, Confirmation Checks, Comprehension Checks, Direct Requests for help, and Indirect Request for Help: These five interactional strategies have been studied extensively in previous research (e.g. Lee, 2002; Long, 1983) and are known as modification strategies or interactional modifications. These strategies are used to achieve mutual comprehension through interactional modifications. Requests for clarification are actually asking for modified input from the interlocutor and confirmation checks are to confirm the correctness of one's understanding that may lead to input modifications if the understanding is incorrect. Requests for help and comprehension checks, on the other hand, involve output modifications. They are used to ensure the comprehensibility of learner's output. It is

noted that indirect requests for help are distinguished from direct requests for help in this study when their use seems to be partially restricted in text-based SCMC. Learners cannot elicit help indirectly by indicating their problem nonverbally with pause or eye contact in text-based SCMC, although they can still indicate their problems verbally and use a question mark for rising intonation. These modification strategies tend to be easier to identify than the other CSs in terms of their relatively fixed forms; however, it would be dangerous to distinguish the forms alone without taking the functions in the local sequence environment into account (Schegloff, 1981). Two excerpts are provided below as examples.

Excerpt 2: Video-based SCMC in English

<Turn 1> LE: So may be it's best to go to Germany to study Law. [That becomes]	1
<Turn 2> LC: [你會說::] ¹	2
(<i>Can you speak::</i>)	
你會說德文嗎?	3
(<i>Can you speak German?</i>)	
<Turn 3> LE: Excuse me. I:: I can't really understand.	4
<Turn 4> LC: 你會說德國話(.)嗎?	5
(<i>Can you speak Germanic language?</i>)	
<Turn 5> LE: Really little. I can't, I can't really do it hh well.	6

In excerpt 2, the learner of English (LE) who is a native speaker of Chinese seems to request clarification implicitly by showing her inability to understand her peer's message according to the form alone at turn 3. However, if taking the local sequence of turns into account, her attempt is more likely to reflect her inability to catch her peer's question due to the overlapping speech as shown at line 1 and line 2

¹ Brackets are used to mark the overlapping speech. As LC's talk at line 2 takes over the turn, it is viewed as part of turn 2.

or the unexpected code switching to Chinese in English-based interaction. That is, the attempt is probably a request for repetition rather than a request for clarification. Similarly, the question alone as shown at line 7 in excerpt 3 seems to be a typical example of a comprehension check. However, it should rather be seen as an attempt to test her understanding of the preceding message according to the context. Sequentially, the attempts in turns 4 and 6 are to further verify her peer's claim of being able to understand imperfect utterances produced by non-native speakers of English by a more specific situation: a lexical problem. The attempt to confirm old information by asking questions based on established information, which is also known as hypothesis testing, is viewed as one type of inferential strategies. Inferential strategies are also one interactional strategy identified in this study and will be addressed later in this section.

Excerpt 3: Video-based SCMC in English

- <Turn 1> LC: Umm I think when I speak, Umm 我說中文的時候, 如果我說錯了, 中國人嗯 1
聽不懂我的說法. 可是, umm when a Chinese person speak English wrong, 2
I still understand them. Even though it's wrong, I:: I get what they mean[↑]. 3
So I think that's different. If I get something wrong in Chinese, they just 4
don't understand[↑]. 5
*(when I speak Chinese, if I said it wrong, Chinese people umm couldn't understand
what I said. However,)*
- <Turn 2> LE: Hmmm. [It's interesting] that you will understand even like what I was 6
talking to you. Do do you understand what I am talking about hh? 7
LC: [Do you think]² 8
- <Turn 3> LC: Yeah. Even you are speaking wrong, I still understand. Umm like [if you 9
put the words] 10
- <Turn 4> LE: [If I 11

² As LC's talk at line 8 does not take over LE's turn, it is still in LE's turn space.

said wrong] 12

<Turn 5> LC: Yeah hh. If you put the words in the wrong order↑, I just rearrange them 13
in my head, I know what you mean↑. But if I speak wrong in Chinese, 14
they Just don't understand. 15

<Turn 6> LE: Hmm. And if I can't really spell out, if I really can't speak the word, 16
can you still understand me hh? Ha. 17

<Turn 7> LC: Yeah. I mean if if you don't, if it's one word you don't say right, I can 18
guess what's it. 19

Input Elicitation Strategies, Feigning Understanding, and Inferential

Strategies: These three strategies are used to manage conversational discourse in general and promote conversational flow in particular. Moreover, they seem to share some features according to the previous research. As discourse is indeed an interactional achievement, Schegloff (1981) suggested that some verbal or nonverbal reactions that come between sentences should not be overlooked, but rather should be distinguished in terms of their interactional functions. He recognized reactions such as “uh huh” and “I see” as the continuation signals since these reactions can encourage the continuous talk by showing the listener’s current state of understanding, attention, and interest. The continuers can be used in the primary speaker’s turn space (also known as “back-channel communication”) or used to pass a turn. When the intention to pass a turn is relatively overt, the effect of back-channel continuation signal may be disputed since the sight of contingent alternative of continuers may be lost once the primary speakers carry on talking (Schegloff, 1981). In excerpt 4, the learner of English (LE) constantly gave short reactions in her peer’s turn space as shown at lines 7 to 9. Her attempt is probably to show her engaging in the conversation and thereby encourage her peer to continue talking. Nevertheless, the effect appears to be unclear until her peer (LC) stopped to help LE deliver the intended message as shown in turn 3. The consequential turn suggests that LC might

do otherwise without receiving the continuation signals from LE in the earlier turn.

Excerpt 4: Video-based SCMC in English

- <Turn 1> LC: Umm. I think Farmville isn't too bad. Because when you put the crop, 1
you have to [wait] like a day or two days [for harvest.] So like you 2
can't play the game straight away↑[.] But...urr my brother↓[,] 3
and also I saw it in some of the cyber-cafes in Taiwan it happens too. 4
My brother likes to play like the shooting game↑. Well, [like you take out 5
the gun and shoot them↑.] 6
LE: [Uh huh] [Oh, yeah, yeah.] 7
[Haa] [Uh huh.] 8
<Turn 2> LE: [Uh huh. Oh. Oh, 9
oh. C::: urr CA.]³ 10
<Turn 3> LC: CS 11
<Turn 4> LE: Oh, yeah yeah yeah yeah. I know that. 12
<Turn 5> LC: Yeah. CS. And also World of the Warcraft↑. 13

Indeed, the kind of continuation signal has been recognized as a strategy by studies of CSs in SLA. Farrell and Mallard (2006) called it “uptaking”, which they viewed as a strategy to develop new information. Smith (2003b) as well as Rost and Ross (1991) recognized both signals to encourage the continuous talk by showing the listeners’ understanding and direct encouragement with an overt expression. As both attempts are to elicit more information from the primary speaker, Smith grouped them as “input elicitation strategies”. It is noted that as Smith’s study is based on text-based SCMC, the non-verbal signal such as a nod is not included. Although such non-verbal signal can be used in video-based SCMC, the pilot study found non-verbal signals were often accompanied by verbal signals and the redundant coding should be avoided in such cases. Nakatani (2005) also recognized continuation signals as strategies to maintain the discourse. The signals can be

³ This overlapped talk is viewed as LE’s turn as LC reacted to it instead of carrying on her own talk. As LE’s talk had been heard and responded, LE did take over the floor from this aspect.

positive comments (such as “I know what you mean” or “Sounds good”) or repetitions of the primary speaker’s partial or whole message. It is noted that not all repetitions carry the same function. As shown in excerpt 5 below, the learner of English repeated her peer’s utterances at lines 5 and 24 respectively. The repetition at line 5 can be viewed as a continuation signal by showing her current state of understanding, whereas the repetition at line 24 is more likely to confirm her hearing. In sum, input elicitation strategies in this study embrace various attempts to elicit more information from their interlocutors as described above.

Excerpt 5: Video-based SCMC in English

- <Turn 1> LE: Haaa. So...ummm. “What are the most popular leisure activities among
university students in UK?” 1 2
- <Turn 2> LC: Ummm people quite. Some people like to play sports quite a lot. Like
umm football [which] 3 4
- <Turn 3> LE: [Football.] Mm hmm. 5
- <Turn 4> LC: Yeah. Which may be soccer. I don't know if you learned it in American
English or English English[.] But...the one they play here is the 6 7
one would you kick, you kick the ball↑, not would you you hold it↑[.] 8
I don't know. Oh, yeah. No, no. Cause football is quite popular in Taiwan, 9
isn't it? 10
- LE: [Mm hmm.] 11
- [Uh huh] 12
- <Turn 5> LE: Oh yeah yeah. I know that. And I think umm some Taiwan students like 13
to play basketball. Especially guys they love to play basketball and girls... 14
they...I I don't know. Girls may be just shopping or haha hang out with 15
friends[.] Got the mails..gossiping.. [haa]..something like that. 16
You know[.] And..and I think most urr most university students like to 17
surfing on internet or..the games[.] Uh huh. So↑ 18
- LC: [Yes. Haa.] [Yeah. Haa] 19
- [Yeah.] 20
- [Yeah. I think they do.] 21
- <Turn 6> LC: Umm I don't know. Other than. In England, other than playing football 22
umm it's pretty much just drinking...[urr] alco.. 23

<Turn 7> LE:	[Drinking?]	24
<Turn 8> LC: Urr like the bar.		25
<Turn 9> LE: Ohoh.		26

Feigning understanding is viewed as a strategy to carry on the conversation (Dörnyei & Scott, 1997). Farrell and Mallard (2006) grouped it with “uptaking” and “forward inference” as strategies to develop new information. Feigning understanding, sometimes known as “faking”, is very similar to “uptaking” in terms of the form and function; only the listener simulates comprehension in the former. One participant in the present study reported that she on occasion feigned understanding as she felt embarrassed to request clarifications frequently as the incomprehension often resulted from her inadequate language ability. When constant interruptions by requesting clarifications might interfere with the conversational flow and also make for an uneasy social relationship (Pica, 1994), the occasional use of feigning understanding seems beneficial in this regard. Learners might feign understanding by giving short responses such as “uh huh” or “yeah” or by answering a non-comprehended yes-no question. The attempts to feign understanding can sometimes be identified in interaction data according to the context. Nevertheless, participants’ retrospective comments are still used more commonly as a research means since feigning understanding is meant to be used covertly. As this study did not plan to ask all participants to provide stimulated reflection, the result may well not be able to reflect all occurrences of its use. The reason for not asking all participants to provide reflections on their use of CSs comprehensively is to avoid the danger of reducing participation due to the commitment in time that this would require.

Inferential strategies are viewed as strategies to build up the conversation by using the established information in the preceding discourse. As the use of inference strategies often involves sophisticated comprehension ability as well as production ability, Rost and Ross (1991) suggested that learners who are capable of using inferential strategies might be at a higher level of language development than learners who often use a global or local (key-word) level of strategies. Learners with lower language proficiency tend to ask global level clarifications frequently as they are unable to indicate their problems precisely and then they may be able to ask more and more local level clarifications with the progress of language proficiency. At this point, forward inference should be distinguished from input elicitation strategies and feigning understanding, despite the common effect on the development of new information as suggested by Farrell and Mallard (2006). Forward inference involves the listeners overtly indicating their current state of understanding through asking questions or making statements based on the established information and then their interlocutors will give further elaboration and more new information according to their questions or statements. Therefore, the conversation is indeed developed by both sides of interlocutors. On the other hand, input elicitation strategies and feigning understanding often indicate the global-level of understanding by giving brief responses and often result in the continuation of talk. The content of the continuous talk is mainly directed by the primary speaker rather than by both sides of interlocutors. As “hypothesis testing” also involves using the established information to indicate a propositional of understanding (or misunderstanding) of the proceeding discourse, it is often grouped with forward inference as inferential strategies (Smith, 2003b; Rost & Ross, 1991). Contrary to forward inference that is to develop new information and move the conversation forward, hypothesis testing is often to verify old information. If the understanding is incorrect, the main conversation may be

halted until the mutual comprehension achieves. From this aspect, Farrell and Mallard (2006) suggested that these two strategies should be in separate categories. It is noted that Farrell and Mallard's hypothesis testing appears to partially overlap with confirmation check. To avoid overlapping coding or confusion, this study does not intend to distinguish forward inference and hypothesis testing. Instead, this study identifies inferential strategies as various attempts to build up the conversation by asking questions or making statements based on the established information, while confirmation check refers to requests for confirmation of the correctness of one's hearing or understanding that often gets a simple confirmation "yes" or a repetition as response. As shown in excerpt 6 below, the learner of English rephrased what she heard and then used a full question "is that what you mean?" to confirm her understanding in turn 2. That is a typical example of confirmation check. After her peer made a response to it in turn 3, the learner of English started to verify her assumption related to her peer's message in turn 4 and then made an inference in turn 6 to indicate her understanding. Her attempts in turns 4 and 6 are coded as the use of inferential strategies in this study.

Excerpt 6: Video-based SCMC in English

<Turn 1> LC: Umm I know a lot of Chinese songs are very... positive. They are very	1
ummm 'China is wonderful', 'China is strong', 'we love China'. And they	2
never negative. But I think the British found it funny to say hh negative	3
things hh	4
<Turn 2> LE: You you thought it funny to...to speak good of your country. Is that	5
what you mean?	6
<Turn 3> LC: Urr yeah, to speak badly of our country. Because...it's funny. I don't know hh	7
<Turn 4> LE: But I heard that...urr you know, they, urr a British, urr no, a European	8
style would usually compliment their their, you know, their love one	9

- <Turn 5> LC: Umm we often↑ compliment people. 10
- <Turn 6> LE: So you not always compliment country. 11
- <Turn 7> LC: No hh. It's funnier we not compliment countries. 12

Framing: Framing involves an attempt to clearly mark off a shift of topics. Long (1983) found no significant difference in the use of conversational frames between NS-NS (native speaker and native speaker) interaction and NS-NNS (native speaker and non-native speaker) interaction. Nevertheless, Smith (2003b) found the high frequent use of framing in his study of text-based SCMC. He suggested that the lack of turn adjacency as well as nonverbal aids might call for the need to explicitly mark the transitions of topics. As a work sheet showing a set of questions based on the suggested topic was provided to help interaction in SCMC, participants in the pilot study often marked the transition by suggesting moving on to the next question or reciting the next question aloud. The pilot study found learners used this strategy in both text-based and video-based SCMC; nevertheless, the result was unable to support or counter Smith's claim that this strategy was promoted in text-based SCMC due to the small sample number.

Verbal Strategy Markers: This strategy can prevent conversational breakdown by signaling to the interlocutor about the use of CSs or less accurate target language forms. One learner of Chinese explicitly marked her switching code to an English term by “我不知道怎么说用中文. 我们叫 Taj Mahal. (I don't know how to say it in Chinese. We call it as Taj Mahal)”. The verbal marker in this case might avoid confusion as the listener was aware of a first language term in the target language speech and would not attempt to recall a group of Chinese words that sound like “Taj Mahal”. In addition, learners also used “you know” or “I mean” to prepare for repairs. Clark (1994, in Dörnyei & Scott, 1997) distinguished terms that

are used to prepare for repair (e.g. “you know” and “I mean”) from terms that are used to indicate imperfect L2 use (e.g. “sort of” and “like”). The former were called “editing terms”, and the latter were called “hedges”. Dörnyei and Scott specifically noted that a broad conceptualization of the latter is analogous to their strategy markers with no mention about the former. Nevertheless, when they described this strategy as using verbal marking phrases to indicate a strategy is used, the verbal markers are supposed to embrace “editing terms”. Self-rephrasing is indeed a strategy in their taxonomy. Besides, the use of “editing terms”, particularly “you know”, often elicited a confirmation of the understanding from their interlocutors or otherwise invited their interlocutors work out a mutual comprehension together, which also agrees with the function of this strategy they suggested. Indeed, the function of eliciting attentive cooperation and thereby helping the achievement of mutual understanding just explains why verbal strategy markers are eligible for an interactional strategy.

Omission: This strategy involves the speaker pretending one word has been said and carrying on the message in the hope that their interlocutor can fill in the gap and understand the message according to the context. From this aspect, Dörnyei and Scott (1997) suggested it should be distinguished from message abandonment that involves giving up the intended message. Accordingly, omission seems better to be grouped as an interactional strategy than a reduction strategy.

Time-gaining Strategies: As language learners generally need extra time to process and plan their target language speech, time-gaining strategies are in great demand to prevent conversational breakdown. Dörnyei (1995) has explained time gaining devices are eligible to be viewed as a CS according to the two defining criteria suggested by Færch and Kasper (1983b): problem-orientedness and

consciousness. In addition, Yamada and Akahori (2007) also found fillers did not only promote communication but also consciousness of learning such as correcting grammatical errors in their empirical study.

There appears to be a divergence of findings between Smith's (2003) and Kost's (2008) studies about the use of fillers in text-based SCMC. Smith found the frequent use of fillers in his study and suggested that the interlocutors tended to be intolerant of waiting time, whereas Kost found no occurrence of fillers in her study and suggested that the interlocutors tended to accept delayed responses in text-based SCMC since they understood typing naturally took time. The pilot study found that learners used fillers such as "um..." much less in text-based SCMC. Besides, they never repeated their interlocutor's question to gain planning time in text-based SCMC, when they did so quite often in video-based SCMC. One learner once even explicitly expressed her need for extra time in video-based SCMC by asking her peer to wait a moment for her. The differences seem to suggest that the medium has a significant effect on this strategy. It is worth noting that the effort of typing might reduce the use of fillers in text-based SCMC, but at the same time the effort might reflect learner's conscious intention to gain time. The intention appears to be less obvious when using fillers verbally.

4.2.2 Compensatory Strategies

Compensatory strategies in this study are limited to strategies used to compensate for the inadequate target language ability through manipulating available language knowledge in order to avoid the overlaps with interactional strategies as well as paralinguistic strategies. That is, the scope of compensatory strategies in this study is relatively narrow compared with compensatory strategies in other taxonomies such as Færch and Kasper's (1983b) or in the Nijmegen's (Kellerman,

1991). The five compensatory strategies investigated in this study are clarified in the following.

Circumlocution, Approximation, and Use of All-purpose Words: These three strategies are mainly to solve lexical problems when language learners do not know or cannot recall one specific target language term. Circumlocution involves illustrating or describing the features of the target word, while approximation involves using an alternative term that shares similar semantic features with the intended term. Use of all-purpose words refers to using a general lexical item such as “thing” or “stuff” to replace specific words. According to the after-task questionnaire, all participants in the pilot study admitted that they used online resources such as Google or a simultaneous dictionary during interaction. They also reported that they felt more confident in text-based interaction than in video-based interaction since they had more time to plan and edit their expression and also search for other resources. As they have consulted other resources, they did not often use these three strategies in both modes of SCMC, particularly in text-based mode.

Literal Translation: This strategy, which involves literally translating a first language term into a target language term to solve lexical problems, was not used frequently in this study. Similar to the aforementioned three strategies, the infrequent use of this strategy might be affected by the use of other resources. Besides, learners in this study could just use their first language instead of a literal translation since their first language was their interlocutors’ learned language. One learner of English insisted on using English only in English-based interaction and translated “小吃” literally to “small eat” when he thought there was no equivalent English word to it. Indeed, “小吃” is often translated into “snack”, but now some people suggest using “little eat” instead since snack in western culture generally refers to what people

have in between meals, while “小吃” that broadly covers many Taiwanese delicacies is often consumed as a meal. As this learner of English coincidentally shared the same view, he chose to use literal translation and discussed the difference with his interlocutor.

Self-rephrasing: This strategy is mainly to ensure the comprehensibility of one's expression by paraphrasing, restructuring, or repeating the produced expression with some new information added. In Dörnyei and Scott's taxonomy (1997), self-rephrasing was distinguished from self-restructuring. The former involves paraphrasing the preceding sentence as learners are uncertain about whether if their expression is close enough to their intended message. On the other hand, the latter involves using an alternative expression when learners realize their incapability to execute the preceding verbal plan. Both strategies involve changing a verbal plan to ensure the intended message can be understood, although the latter is used when learners are less capable of completing the original sentence. This study focuses on their commonality and views them as one single strategy of self-rephrasing. In addition, the intention of using this strategy is often to ensure the comprehensibility of the message by manipulating available language knowledge. As using an accurate form is not the main concern, this strategy is classified as a compensatory strategy instead of a focus-on-form strategy.

4.2.3 Reduction Strategies

Reduction strategies have been recognized in well-known taxonomies such as Færch and Kasper's (1983b) and Tarone's (1977). Corder (1983) viewed them as strategies to avoid risk. Tarone (1980) suggested they are similar to other CSs in terms of conversational effect since the use of reduction strategies often signals to

the interlocutor about problems caused by insufficient linguistic resources. The two reduction strategies investigated in this study are presented in the following.

Message Abandonment and Message Replacement: Learners in the study did not use these two strategies frequently, which might be affected by the fact that they were not required to work on particular linguistic forms and had a great control of their own talk. The examples of these two strategies can be found in excerpt 7 below. After listening to a long description, the learner of English (LE) attempted to make a comment accordingly. Although she ended up replacing and abandoning her intended messages as she was unable to deliver them verbally in turn 2 and turn 4 respectively, her peer seemed to sense the difficulties she had and they still shared a certain degree of mutual understanding. It is noted that message abandonment does not always mean suddenly being silent as this may be considered rude. Learners tended to apologize for their being unable to continue their talk or signal to their interlocutors about the intention to pass the turn due to their inability to carry on the talk. In excerpt 7, the utterance “uh huh” as well as the laughter in turn 4 seems to be a clear signal for such an intention. The laughter appears to be effective to help this learner escape from pressure of production without being rude.

Excerpt 7: Video-based interaction in English

- <Turn 1> LC: (A long description about how her brother was addicted to computer games.)
- <Turn 2> LE: Really?! So, Oh, really?! That's..haa..that's [ha] Rea...haa. Are you 1
are you serious that? [So using that is because] (*Message replacement*) 2
- LC: [Yeah. Haa] 3
- [He is not] 4
- <Turn 3> LC: He is not that crazy. [But he's a little that.] 5
- LE: [Oh, ok. Haa] 6
- <Turn 4> LE: Ok. So you think that is just because he plays the online Games. So[...] 8
 that.. Oh, that's not so..Uh huh. Haa. (*Message abandonment*) 9

LC:
<Turn 5> LC: Haa Yeah.

[Yeah] 10
11

There are two more clarifications that have to be made in regard to the use of these two strategies. Message replacement is different from self-rephrasing since the former involves using a new message to replace the original message, while the latter is indeed a second attempt to convey the intended message through an alternative verbal plan. Another clarification is about the use of message abandonment in video-based SCMC. Participants had to produce a quicker response in video-based interaction than in text-based interaction, so they tended to utter their current thinking. It is nature for them to say “and” or “or” before realizing they have no other things to say. These sentences might sound unfinished, but they were not viewed as the use of message abandonment when any intended messages have been fully delivered.

4.2.4 Focus-on-form Strategies

A communicative approach has been recognized as an efficient way to promote SLA, particularly in fluency. The rationale is to create an interactional environment for learners to acquire a target language through using it. Nevertheless, there has been some concern whether such an approach can also promote accuracy. Lafford (2004) studied the relation of learning context to CS use through investigating two groups of learners who were at home classroom (AH) and who studied abroad (SA) over time. He found that the SA group used consistently fewer CSs than the AH group, especially focus-on-form strategies. The SA group appeared to increase their fluency, but they tended to pay less attention to target language forms since they realized their interlocutors did not often react to their

form-concerned questions unless the meaning could not be communicated. The AH group, on the other hand, tended to produce more accurate language forms but at the same time their concern to use accurate language forms seemed to discourage them from becoming a fluent speaker. In addition, Poullisse (1997) examined compensatory strategies in terms of the principles of clarity and economy and found that compensatory strategies can help clarify the intended message, but are not always brief and economical. Therefore, two interlocutors may agree on a short form to facilitate the interaction when the mutual comprehension is achieved, although it is not always in the accurate target language form. At this point, CSs that are effective to facilitate the conversation, but may not always involve accurate language forms. Three focus-on-form strategies are investigated in this study to identify if learners attend to language forms in meaning-oriented interaction and also if there is any difference in the use of focus-on-form strategies in the two modes of SCMC. Generally, people appear to be more conscious of accuracy in written discourse compared with spoken discourse (Yamada & Akahori, 2007).

Self-correction: This strategy involves self-initiated corrections to ensure the accuracy of one's production. As the use of this strategy alone has reflected learners' attention to language forms, all attempts are coded in this study, regardless of the accuracy of the results of the corrections. Some studies (e.g. Kitade, 2000; Lai & Zhao, 2006; Lee, 2002b) found that text-based SCMC might promote self-correction since learners could look back at their utterances without disrupting the conversational flow due to the nature of written discourse. On the other hand, studies (e.g. Lee, 2002b; Murray, 2000) also found that interlocutors in text-based interaction tended to accept the surface errors (e.g. typographical or spelling mistakes) and left them uncorrected. As learners in the pilot study all admitted using

on-line resources and editing their unsent message in text-based SCMC, it was not surprising that self-correction was used less frequently in text-based SCMC than in video-based SCMC. Although this study did not intend to capture repairs made before the message was sent out by using screen capture technology as suggested by Smith (2008), this factor should not be ignored when comparing the use of self-correction in the two modes of SCMC.

Meta-talk: This strategy involves using the target language to reflect on one's own or interlocutor's use of the target language. Meta-talk (a language-related episode) has been highlighted in Swain's (1998) and in Swain and Lapkin's (1995, 1998, 2002) studies to account for the role of interaction in second language learning. As they defined it as any part of a dialogue where learners talk about the language they are producing, question their language use, or correct themselves or others (Swain & Lapkin, 1998, p. 326), their meta-talk appears to overlap with some other CSs identified in this study. To avoid overlapping, meta-talk in this study only includes explicit discussion about one particular language usage learners noticed from their own or their interlocutor's talk, and learners' reactions to corrections or language suggestions provided by their interlocutors.

Own Accuracy Check: This strategy involves asking a concrete question or repeating the unsure term with a rising intonation (or a question mark in text-based interaction) to check the accuracy of one's expression. As the checking point is form-oriented rather than meaning-oriented, own accuracy check is certainly eligible for a focus-on-form strategy that is different from comprehension check used to ensure the intended meaning has been understood by the interlocutor.

4.2.5 Sociocultural Strategies

Savignon and Sysoyen (2002) pointed out that sociocultural strategies were not included in most existing CS taxonomies, although sociocultural competence has been considered as one component of communicative competence (Canale & Swain, 1980; Bachman & Palmer, 1996). While CMC can be a means to have individual learning with a tandem partner, such socio-personal CMC may facilitate language acquisition as well as sociocultural and intercultural development, which might not be allowed in some educational CMC if the interaction is not affected by socio and personal factors (Lamy & Hampel, 2007). As this study addresses tandem learning interaction in SCMC, two sociocultural strategies are included in the coding categories to investigate the social and cultural aspect of CS use.

Social Formula: As formulas generally contain the social knowledge shared in a given speech community, the use of these fixed patterns can enable learners to express properly in particular situations (Ellis, 1994). Learners in the pilot study tended to use formulas for social purposes such as greeting and leave-taking as well as an apology for inadequate language ability or overlapping talk. One learner apologized for talking in her interlocutor's turn accidentally by saying "sorry to interrupt you" and then signaled her interlocutor to carry on talking. This expression is often used as a polite way to apologize for accidental interruption or to request for taking over the turn.

When most social formulas used by learners in the pilot study were in polite tone, the coding appeared to overlap with politeness that was defined as the use of explicitly polite formulations in Smith's (2003b) study. Smith recognized the use of tone as one CS in his study and found politeness was one of the most frequently used CSs. He suggested the frequent use of politeness might be affected by the need to

ensure the engagement of cooperative relationship due to sensory limitations in text-based SCMC. Learners in the pilot study did not really use the polite tone more frequently in text-based SCMC compared with video-based SCMC. Instead, they tended to be polite in all experimental interactions consistently due to the intention to keep a positive social relationship with their tandem learning partners. Although they sometimes preferred to use some learnt causal expressions to sound more native-like and friendly, the informal formulas they used, such as “talk to you soon” for leave taking, indeed showed a certain degree of politeness in terms of their functions in a conversational discourse. In addition to politeness, Smith (2003b) also investigated the use of two lower degrees of tone: directness and rudeness, which refer to overly direct language and rude language respectively. Consonantly with Smith’s (2003b) study, the tone of directness and rudeness was not found much in the pilot study. Some direct expressions are found in the pilot study when learners were struggling to express themselves clearly, whereas the use of rude language was never been found. As learners in this study were all eager to learn the target language and its corresponding culture from their peers, they were less likely to be impolite or rude on purpose. Instead, they all attempted to give their peers a positive impression by being polite. Nevertheless, one learner of Chinese reported that she was still largely unaware of Chinese oral culture, although she tried to use polite phrases as much as she could. Another learner of Chinese also reported that he often had a hard time to distinguish between slang and proper language and thus he worried he might sometimes offend others by using slang by accident. Whereas learners in the pilot study reported their inadequate ability to manipulate the tone, investigating the use of tone based on their performance might not be valid. Moreover, the use of politeness indeed largely overlapped with the use of social formula. Therefore, this study only investigates the use of social formula, but not the use of tone.

Code-switching: This strategy involves using a first language term in the target language speech for purposes. Darhower (2002) viewed it as an efficient strategy to maintain overall communication in the target language when interlocutors were from the same first language background. On the other hand, Waston (2005) considered it as a reduction strategy in terms of interactional co-operation when investigating NS-NNS interaction. As participants in this study all knew their interlocutors' first language as their learned language, the use of code-switching in this study did not mean learners gave up delivering their intended message and it should therefore not be viewed as a reduction strategy.

It is noted that although code-switching can be used to maintain the conversation by learners in this study, it does not seem to be the primary function of its use in this study. Learners tended to use a first language term to introduce something which originated in its corresponding culture. In such cases, its use seems to have a sociocultural function rather than simply compensate for inadequate language ability. It is also interesting to note that participants also on occasion switched code to their learned language in their first language speech. Although the use of CSs in their first language speech (i.e. when playing the role of a language expert) was not investigated in this study, such examples could support the claim that the lack of vocabulary was not the only reason for participants in this study to switch code. Moreover, as this study attempts to investigate CS use in terms of functions, the first language term used to indicate the language problem is not coded as the use of code-switching. For example, one learner of Chinese asked “星座, 那個 zodiac, 對吧? (Star signs. That is zodiac, right?)” As her attempt was to confirm her understanding, this is an example of confirmation check rather than code-switching. Excluding the examples of using first language to facilitate use of other CSs, the use of code-switching identified in this study is mainly for social purposes and thus is

more reasonable to be grouped as a sociocultural strategy than a compensatory strategy.

4.2.6 Paralinguistic Strategies

Paralinguistic strategies are separated from the aforementioned five categories since the functions in text-based SCMC and in video-based SCMC are discrete. Indeed, these strategies can only be used in one mode of SCMC, not the other. Except for mime that can only be used in video-based SCMC, the other four paralinguistic strategies can only be used in text-based SCMC.

Mime: This strategy has been recognized in taxonomies of CSs such as Tarone's (1978), Færch and Kasper's (1983b), and Dörnyei and Scott's (1995, as seen in Dörnyei & Scott, 1997). This strategy involves using nonverbal behavior to either completely replace verbal output or accompany with verbal output in order to compensate the inadequate language ability. Interaction in video-based SCMC can allow the use of this strategy due to the availability of visual aids. However, gaze or eye contact is not examined in this study since it is hard to tell from the recorded videos whether the participants gazed at their peers or something else displayed on the computer screen.

Use Text or Symbols to Display the Effect of Intonation and Use of Emoticons: Although text-based interaction restricts the use of mime, studies of text-based CMC (e.g. Negretti, 1999; Simpson, 2002; Smith, 2003; Peterson, 2006) found that some strategies can be used to mimic spoken language and some are actually generated from the natural of written discourse. Use text or symbols to display the effect of intonation and use of emoticons are both to mimic spoken language. It is noted that use text or symbols to display the effect of intonation seems

to be language-specific. For example, the use of tilde “~” in the end of a word or sentence are often used to display a extend sound in Chinese text-based interaction as multiplying the letters (e.g. “soooo”) is not allowed in written Chinese.

Onomatopoeia is also one strategy to mimic spoken language, but it is not examined in the present study. Based on the results of pilot study, the use of onomatopoeia generally falls into two categories: laughter and reactive tokens (Clancy, Thompson, Suzuki & Tao, 1996). These two categories could be divided into several sub-categories in terms of their functions such as passing the turn. Counting a group of presented forms without taking their functions into account seems too divergent away from the aim of this study. Besides, some examples of its use actually overlap with other CSs. For example, the ‘continuers’ (Schegloff, 1981), as one kind of reactive tokens, is coded as an input elicitation strategy in this study. It seems more meaningful to compare the use of continuers in text-based and video-based SCMC than investigating the use of onomatopoeia alone in text-based SCMC.

Punctuation: This strategy involves using punctuation extensively to indicate intonation and express surprise. It is noted that if punctuation is used without any significant function, it cannot be viewed as a strategy. Take the expression “Fish and tofu? Is that delicious?” for example, only the first question mark is coded as CS use since its use indicates a raising intonation and forms a question, while the second question mark can be deleted without any alternative meaning. In addition, Negretti (1999) also found the use of ‘ellipsis points (...)’ in text-based interaction can be viewed as a pause maker or as a signal to show the intention of changing topics or shifting turns. ‘Ellipsis points’ can also be used to show no comment sometimes. Therefore, the use of ellipsis points is coded as one

type of punctuation in this study.

Substitution: This strategy involves using abbreviations or acronyms to save typing time (Smith, 2003b; Peterson, 2006) or to avoid mistakes for some language learners (Smith, 2003b). Although Chinese writing system does not really allow the use of abbreviations or acronyms, this strategy is still investigated in this study in case some equivalent use may be found in Chinese interaction.

4.2.7 Summary

To sum up, the aforementioned CSs are inventoried according to the six categories in table 5 below. Definitions of CSs that have been presented in the previous chapter are not included in this inventory to avoid redundancy. Instead, examples are selected from the pilot study to summarize the clarifications and classifications of CSs that have been presented in this section. In addition, this inventory also lists the relevant studies discussed in this section. The inventory does not intend to indicate whether these CSs were included in other taxonomies as this has been done in Dörnyei and Scott's (1997) review article and a number of CSs identified in this study are indeed adapted from their taxonomy. Finally, the applicability of each CS use in text-based and video-based SCMC is indicated since the coding categories are to serve as the instrument for investigating CS use in the two modes of SCMC.

Table 5 Inventory of CSs with selected examples, references, and a check list of practicability in the two modes of SCMC

Interactional Strategies:	Example	References	Text-based	Video-based
- Request for Clarification	"What is Bolognese?"	Dörnyei & Scott (1997); Lee	✓	✓

		(2002b); Smith (2003b)		
- Confirmation Check	“You you thought it funny to...to speak good of your country. Is that what you mean?”	Dörnyei & Scott (1997); Lee (2002b); Smith (2003b)	✓	✓
- Comprehension Check	“You know what I mean?”	Dörnyei & Scott (1997); Lee (2002b); Smith (2003b)	✓	✓
- Direct Request for Help	“怎麼說 festival? 用中文.” (<i>How to say festival? In Chinese.</i>)	Dörnyei & Scott (1997); Lee (2002b); Smith (2003b)	✓	✓
- Indirect Request for Help	A: ...所以出去玩, 跟他們的...同:: ↑ (...so when going out, with their... co-::↑) B: 同事, colleague. (co-worker, colleague.)	Dörnyei & Scott (1997); Smith (2003b)	✓	✓
- Input Elicitation Strategies	A: Some people like to play sports quite a lot...like umm football [which] B: [Football.] Umhum.	Farrell & Mallard (2006) ; Nakatani (2005); Rost & Ross (1991); Schegloff (1981); Smith (2003b)	✓	✓
- Feigning Understanding	A: So she is like a mentor to you. B: Yeah. A: Do you know the word mentor? B: Not exactly.	Dörnyei & Scott (1997); Farrell & Mallard (2006)	✓	✓
- Inferential Strategies	A: I never I never went to an actual Taiwanese class. What'd they like? B: So your class just for urr some foreigners to attend.	Farrell & Mallard (2006); Rost & Ross (1991); Smith (2003b)	✓	✓
- Framing	Use “Ok. First one.” to indicate the closure of chatting and start of topic-based interaction.	Long (1983); Smith (2003b)	✓	✓
- Verbal Strategy Markers	“我不知道怎么说用中文. 我们叫 Taj Mahal.” (<i>I don't know how to say it</i>)	Dörnyei & Scott (1997); Smith	✓	✓

	<i>in Chinese. We call it as Taj Mahal.</i>)	(2003b)		
- Omission	“Do you have any (.), you know? Do you?”	Dörnyei & Scott (1997); Smith (2003b)		✓
- Time-gaining Strategies	A: What’s your favorite leisure activity? B: Umm my favorite leisure activities. Ok. urr I love to see movies.	Dörnyei (1995); Dörnyei & Scott (1997); Smith (2003b); Kost (2008)	✓	✓
Compensatory Strategies:				
- Circumlocution	Use “...urr for example if we play the facebook, we have to... If I click. If I click an button and I have to wait.” to replace “the loading time”.	Dörnyei & Scott (1997)	✓	✓
Approximation	Use the term “vegetables” to replace one specific type of vegetables “mustard leaf”.	Dörnyei & Scott (1997)	✓	✓
- Use of All-purpose Words	“So do you play that?” Use “that” to replace one particular term until the learner finally learned how to say it from her peer’s talk.	Dörnyei & Scott (1997)	✓	✓
- Literal Translation	Translate “小吃” literally into “small eat”.	Dörnyei & Scott (1997)	✓	✓
- Self-rephrasing	“Cause there are no place for, urr no proper place for umm like boxing↑ in Taiwan. There are not many places for that.”	Dörnyei & Scott (1997); Smith (2003b)	✓	✓
Reduction Strategies:				
- Message Abandonment	“因為我的朋友說, 因為..如果..阿... 阿我不知道, 呵. 阿算了, 算了, 呵.” (<i>Because my friend said, because... if...ah...ah I don’t know hh. Ah forget it, forget it hh.</i>)	Dörnyei & Scott (1997); Smith (2003b)	✓	✓
- Message Replacement	“That’s..haa..that’s ha Rea...haa. Are you are you serious that?”	Dörnyei & Scott (1997)	✓	✓
Focus-on-form Strategies:				

- Self-correction	“He don't urr he doesn't usually talk to people.”	Dörnyei & Scott (1997); Kitade (2000); Smith (2003b); Smith (2008)	✓	✓
- Meta-talk	The learner described how people celebrate Halloween in his country and mentioned kids go ask for “好吃的東西 (<i>something tasty</i>)”. As he noticed the term “糖果 (candy)” from his peer’s talk a few turns later, he added “摠, 就是糖. 對, 是給他們吃糖果. (<i>Um, it is candy. Yeah, what they are given to eat is candy</i>)” before responding to his peer’s talk.	Smith (2003b); Swain (1998)	✓	✓
- Own Accuracy Check	One learner checked if she pronounced the term “節慶 (festival)” accurately by asking “jiē-tǐng? Festivals, jiē-tǐng.”	Dörnyei & Scott (1997)	✓	✓
Sociocultural Strategies:				
- Social Formula	“Sorry to interrupt you.”	Chun (1994); Peterson (2006); Smith (2003b)	✓	✓
- Code-switching	“雖然我沒有宗教, 但是我也過聖誕節. (Several lines are deleted here.) 摠一樣的就是那個..復活節. 那個 Easter, 你知道嗎?” (<i>Although I don't have religion, I also celebrate Christmas. (Several lines are deleted here.) um what is the same is that...Easter, that Easter, do you know?</i>)	Chun (1994); Darhower (2002); Dörnyei & Scott (1997); Kötter (2003); Waston (2005)	✓	✓
Paralinguistic Strategies:				
- Mime	“真的聖誕樹,樹會..摠..它的葉會..可能會破掉 ((gesturing something is falling)).” (<i>The real Xmas tree, tree</i>	Dörnyei & Scott (1997)		✓

	would.. um.. its leafs could be broken.) Note: According to the context and her gesture, the learner meant to say “falling” rather than “broken”.			
- Use of Text or Symbols to Display the Effects of Intonation	“there are lots~~~ of foods” The symbol of tilde here is to display the extended sound.	Peterson (2006); Simpson (2002); Smith (2003b)	✓	
- Use of Emoticons	Use a facial expression icon “ :(“ to represent a sad feeling.	Peterson (2006); Simpson (2002); Smith (2003b)	✓	
- Punctuation	“Yes?” The question mark here indicates the rising intonation.	Negretti (1999); Simpson (2002); Smith (2003b)	✓	
- Substitution	“Have u ever tried it?” The letter “u” is a substitution for “you”.	Simpson (2002); Smith (2003b)	✓	

4.3 Turn Taking

As making a comparison between text-based and video-based SCMC in CS use is also part of the study purpose and the organization of turn taking is fundamental to the investigation in conversational interactions, the first part of this section will outline the different turn taking systems of text-based and video-based SCMC along with the treatment for making the two systems comparable. Then, as the investigation in this study involves the types, the number, and the distribution of CSs employed by the participants, the second part of this section will describe how the use of CSs embedded in different turn units and thereby clarify the scheme for quantifying the use of CSs in this study.

4.3.1 Turn Taking in Text-based and Video-based SCMC

Sacks, Schegloff and Jefferson (1974) considered turn taking as a basic form of organization for conversation and found this organization appears

overwhelmingly as one party talking at a time with occasionally brief overlapped talk based on their observations of spoken communication. CMC studies such as Chun's (1994) found that the turn taking structure in text-based interaction is different from spoken communication, which should include video-based SCMC. In order to have a valid comparison between text-based and video-based SCMC in the use of CSs, it is important to make turn taking systems in these two modes of SCMC become as comparable as possible.

Despite the different turn taking systems in text-based and video-based SCMC, a turn commonly refers to "each time there was a transfer of the 'floor' from one participant to the other" (Smith, 2003b, p. 39). Sacks, Schegloff and Jefferson (1974) characterized turn as a unit interactively determined by interlocutors in a way interconnecting "stop by a current speaker" and "start by a next speaker". Schegloff (2000) considered "adjacency" as a central role in oral conversational sequences since every turn should address to its adjacent pair, unless otherwise provided for. Accordingly, the order of turns in oral communication appears to be linearly arrayed. On the other hand, Smith (2003a) featured the lack of turn adjacency as the uniqueness of synchronous text-based interaction. The order of turn taking in text-based interaction appears to be splitting due to the lack of turn adjacency. It seems problematic for interlocutors in text-based interaction to take turns at the correct transition points; therefore, they might initiate a new topic without noticing the prior one has not finished yet and end up talking in parallel about an old topic and a new topic. Smith also found that some turns might get delayed responses few turns later or might even be ignored completely in his study of negotiated interaction in text-based interaction. To reflect on this feature, he proposed a split negotiated routine. It is interesting that Simpson (2002) and Peterson (2006) also found "split turns" in their studies, but their "split turns" seem to be more like a multi-unit turn

based on their description. Simpson (2002) found interlocutors split their turns (or more like sentences or clauses) to signal their continuous typing in order to hold the ‘floor’ and increase interactivity since they could not hold the ‘floor’ by simply carrying on talking as in spoken communication. Peterson (2006) found splitting turns could supply information as well as move the discourse forward. His example showed that one interlocutor responded to his interlocutor’s question and then repeated his own question again in one turn when he assumed his interlocutor probably overlooked his question due to their prior “simultaneous” typing. According to the example he provided, his splitting turns appear to be more like two messages in one turn.

A turn in text-based interaction should be easier to define since it does not allow overlapping talks as in video-based interaction. Nevertheless, it appears to be inappropriate to count it as a turn whenever an interlocutor hits the enter key and sends out their message. It is important to see if the ‘floor’ has shifted. Accordingly, it seems reasonable to count one split message as two turns, if the interlocutors cut in to the split turns and took the ‘floor’. The way how this study defines a turn in text-based interaction is illustrated with examples in excerpt 8 below. Lines 1 and 3 are actually one sentence carrying one message, eat rice or pasta; however, with this message was interrupted by LE accidentally, the ‘floor’ has shifted and the turn has been split into two. On the other hand, when LC attempted to send out her message piece by piece, the expressions at lines 6 to 9 are viewed as one single turn as the ‘floor’ has not shifted. Indeed, both turns 5 and 7 appear to agree with the finding in Simpson’s (2002) study that learners may split their turns so as to hold the floor.

Excerpt 8: Text-based SCMC in English

<Turn 1> 08:19:38 LC: at home we usually eat some rice with stir-fried meat and vegetables	1
<Turn 2> 08:19:56 LE: so u eat rice too?	2
<Turn 3> 08:19:58 LC: or maybe pasta and bolognaise	3
08:20:21 LC: haha yeah, but in the UK we eat lots of different places' food	4
<Turn 4> 08:20:22 LE: what is bolognaise	5
<Turn 5> 08:20:32 LC: i spelled it wrong	6
08:20:34 LC: hahaha	7
08:20:43 LC: but i can't remember how to write it	8
08:21:12 LC: it is meat which is ground up into small pieces	9
<Turn 6> 08:21:15 LE: ha ha t	10
<Turn 7> 08:21:22 LC: and cooked with tomato sauce	11
08:21:25 LC: and onions	12
08:21:30 LC: and mushrooms	13
<Turn 8> 08:21:38 LE: ohoh that's sund great!	14

A turn in video-based SCMC as in other oral communication appears to be more difficult to define compared with text-based SCMC due to the occurrences of gaps and overlaps. Sacks, Schegloff and Jefferson (1974) pointed out that the transitions from one turn to a next are generally without a gap or overlap, although there may be a slightly gap or overlap occasionally. They carefully defined a gap as silence after a possible completion point and generally would not remain for long, which is distinguished from a pause that refers to silence occurs in a turn without being talked in by others. If a gap has been finally filled by the interlocutor, it becomes a lapse. On the other hand, if the talk has been resumed by the prior speaker, then a gap becomes a pause. It is essential to recognize who initiates the talk after silence when defining a turn in video-based SCMC, although this study does not intend to distinguish between gaps and pauses as the distinction may not be applicable to text-based SCMC due to the unavoidable waiting for a typed response. If it is the prior speaker who resumes the talk, the prior speaker's turn continues. On

the other hand, if it is the interlocutor who starts to talk, the turn shifts to the current speaker.

Overlapping talk is another feature of video-based SCMC that is less likely to be found in text-based SCMC. Schegloff (2000) distinguished four types of overlapping talk, which are terminal overlaps, continuers, conditional access to the turn, and chordal or choral. Terminal overlaps occur when the interlocutor starts to talk due to a false assumption that the prior turn has finished. This type of overlap generally ends with the one talking in another's turn stopping themselves. Such overlaps generally do not cause turn shifts, unless the prior speakers yields their floor. In this study, such overlaps occasionally caused brief silence and then resumed either by the prior speaker inviting the following speaker to take over the turn or the following speaker signaling the prior speaker to carry on the unfinished turn. In the latter case, the turn has shifted to the following speaker, although it may shift back to the prior speaker promptly.

The second type of overlaps, continuers, do not seem to affect the turn taking sequence as they often occur in intra-turn pauses rather than take over or interrupt a turn-in-progress. Schegloff's (1981) reviewed the previous studies in "back-channel communication" and suggested the use of utterances such as "uh huh" between sentences might encourage the continuous of the turn-in-progress. As its use often encourages more input from the interlocutor, such utterances are recognized as input elicitation strategies in this study.

The third type of overlapping talk, conditional access to the turn, often leads to turn shifts. According to Schegloff (2000), it occurs when the current speaker has difficulty in completing the current turn and thus yields the turn to another or invites another to speak in his turn space with the condition of furthering his undertaking. Similar to his example of word search, learners in this study sometimes invited their

interlocutor to talk in their turn when they were unsure of vocabulary or unable to recall a particular word in the target language. They often repeated the word their interlocutors suggested as a reaction in order to show their understanding or to practice and reinforce the learning of this particular word. Sometimes, they would request repetition if they did not get the word or start a meta-talk if they found the mismatch between their intended word and their interlocutor's suggested word. In either case, the turn appears to shift to their interlocutor briefly and then back to the learners again. An example is provided in excerpt 9 below. Brackets are used to indicate overlapping utterances and space are kept to show the duration of overlaps. The first overlap (line 1 and line 5) and second overlap (line 3 and line 6) both occurred at intra-turn pauses in LE's turn and did not cause a turn shift. The third overlap (line 4 and line 7), which was probably triggered by LE's indirect request for help, caused the turn shift to her interlocutor briefly as LE yielded her floor by stopping to listen to her interlocutor. The fourth overlap (line 8 and line 9) occurred as LE was pleased by getting the intended word and a turn was shifted back to her when her interlocutor stopped talking.

Excerpt 9: Video-based SCMC in English

<Turn 1> LE:	I don't like play online games. Haa[.] Because sometimes we...urr for example if	1
	we play the facebook, we have to...if I click. If I click an button and I have to wait.	2
	You know[.] You have to wait. Wait for a moment and they will...urr I don't	3
	know how to say. Haa You know? You know what I mean? [Just umm...]	4
LC:	[Yeah.]	5
	[Yeah.] ((<i>keep nodding</i>))	6
<Turn 2> LC:	[Yeah. The loading]	7
	The loading time. You click and you're [like waiting to play.]	8
<Turn 3> LE:	[Yeah, yeah, yeah. Loading time.]	9
	Yes, yes, yes. Haa That's what I mean.	10

The last type of overlapping talk, particularly when laughter involved, appears to be problematic to make turn taking systems of the two modes of SCMC comparable. Learners in this study often laughed while their interlocutors were talking in video-based SCMC. As the laughter was indeed in the current speaker's turn space, it did not really affect the sequence of turns. If both interlocutors ended up laughing together, the sequence of turns was determined by who resumed talking. Generally, laughter was not viewed as a completed turn unless it was used to pass a turn intentionally. In excerpt 10 below, LC clearly marked the shift of topic in turn 3 when he realized his interlocutor LE got nothing to say and passed her turn by laughter. The transition in this example is quite clear due to a brief silence. Laughter in text-based SCMC was recognized as a completed turn more frequently compared with video-based SCMC. Take excerpt 8 above for example, laughter occurred at line 10 seemed to be elicited by her interlocutor's laughter in line 7. If it were in video-based interaction, it might be considered as a brief overlap in a current speaker's turn space. Nevertheless, in order to avoid unnecessary manipulation of the interaction data, laughter in this case would still be considered as a turn. Besides, typed laughter in text-based SCMC seems reasonable to be considered as a conscious reaction compared with its occurrence in video-based SCMC. Although the way to deal with laughter in the two modes of SCMC may not completely match, the slightly mismatch does not seem to affect the research results. Besides, it seems to be the best solution to keep the analysis consistent without too much manipulation of the interaction data.

Excerpt 10: Video-based SCMC in English

<Turn 1> LC: Hhh so urr yeah, it's very popular here, and in the UK. It's very popular so...But I	1
haven't played for a long time, so...Maybe after college.	2

<Turn 2> LE: Haha ((<i>keep smiling without giving any further responses</i>))	3
<Turn 3> LC: Umm ok, so question number two, ur what're the most popular leisure activities	4
among university students in UK or Taiwan?	5

4.3.2 Turn Taking and the Use of CSs

After an overview of the turn taking system of SCMC, this part of section will delve further into the relation of turn units to CS use. A turn may be consisted of a few words only, including but not limited to exclamations (e.g. “oh”) and laughter (e.g. “ha”), in order to show the current status of understanding or signal the intention to pass a turn. On the other hand, a turn may consist of several sentences, which is also known as a multi-unit turn. In addition, “splitting turns” appears to be a new type of turn in text-based SCMC. In spoken communication, people can hold their ‘floor’ simply by continuous talk. Schegloff (1973, in Schegloff, 1981) found speakers in a spoken discourse sometimes rushed through the junctures until reaching a point into the next turn and then pausing a bit before carrying on. Although it may be an efficient device to extend the turn and hold the ‘floor’ in spoken communication, it cannot be applied to text-based communication. Consistent with the finding in Simpson’s (2002) study, learners in this study tended to split turns in order to hold the ‘floor’. As the extended turn in spoken communication is considered as one turn, splitting turns in text-based SCMC should also be considered as one turn unless these turns are cut in by their interlocutor’s message. In excerpt 11 below, both LE and LC attempted to send out their message in parts. LE seemed to type her message in one attempt without paying attention to her interlocutor’s talk. Therefore, her message at lines 7 and 9 did not really answer her interlocutor’s questions at lines 6 and 8. Besides, she did not notice the mistake she made at line 3 until she read her interlocutor’s message at line 6 and then made a

correction at line 12. Although it appears to be one message split into three parts, the split parts as shown in lines 5, 7 and 9 are viewed as 3 turns as the three parts have been cut in by her interlocutor's attempts at responding to her uncompleted message. On the other hand, the split parts of LC's message in lines 10 and 11 are considered as one multi-unit turn rather than two separate turns since the turn has not been cut in by LE. The aforementioned way to distinguish a turn seems effective to make turn taking systems of the two modes of SCMC comparable without altering the authentic chat logs.

Excerpt 11: Text-based SCMC in English

<Turn 1> LE: have u ever eat 粽子?	1
<Turn 2> LC: what is that?	2
<Turn 3> LE: we eat it during the dragon festival	3
<Turn 4> LC: oooh	4
<Turn 5>LE: do u know that	5
<Turn 6> LC: the dragon festival?	6
<Turn 7> LE: <u>the shape is like a triangle</u> (<i>Circumlocution part 1</i>)	7
<Turn 8> LC: with the boats?	8
<Turn 9> LE: <u>covered with some leaves</u> (<i>Circumlocution part 2</i>)	9
<Turn 10> LC: oooh	10
LC: oh i think i have eaten it before	11
<Turn 11> LE: the Dragon Boat Festival	12

Splitting turns and multi-unit turns mentioned above are indeed closely related to the method of counting occurrences of CS use in this study. Splitting turns may consist of one message in one attempt. In excerpt 11 above, the LE attempted to describe the appearance of “粽子 (rice dumpling)” at lines 7 and 9 right after her question at line 5. Although her attempt was split into turns when her interlocutor cut into her talk, the two parts of description should only be counted as one example of

circumlocution use since they are indeed one strategy to solve one single problem when she seemed unable to recall the translated name at that moment. Another type of one strategy used in different turns occurs in negotiated interaction as shown in excerpt 12 below. The LC wanted to ask for clarification of an unfamiliar term in the target language, but she was unable to make her request precisely at her first attempt in turn 3. As a brief silence indicated the closure of turn 2, LE and LC started to talk almost simultaneously at lines 4 and 5. Although LE terminated her own talk as soon as she realized the overlap, she seemed to miss part of LC's question already. As a result, LC made another attempt to ask for clarification with modifications in turn 5 and also in turn 7 in order to negotiate for mutual comprehension with her interlocutor. Since turns 3, 5 and 7 are to solve the same problem, these attempts seem reasonable to recognize as one example of request for clarification.

Excerpt 12: Video-based SCMC in Chinese

- <Turn 1> LC: 那請問在台灣有那些節慶? 1
(So what festivals are there in Taiwan?)
- <Turn 2> LE: 台灣的...台灣就是...過年, 然後端午節, 然後還有...中秋節. 對對. 然後 2
 還有什麼? 好像就這幾個比較大. 3
(Taiwanese... In Taiwan, there are...New Year, Dragon Boat Festival, and then... Mid-Autumn Festival. Yeah, yeah. And then what else? They seem to be the major ones.)
- <Turn 3> LC: [我不知道...你..二號]...你說的...節慶. *(Request for clarification part1)* 4
(I don't know...you...number two...the festival...you have said.)
- LE: [還有掃墓, 清明節.] 5
(And sweeping tombs, Tomb-sweeping day)
- <Turn 4> LE: 一...蛤? 一月二號? 6
(First...huh? January second?)
- <Turn 5> LC: 哦. 是不是. [你說的,] 過年[,]然後別的..[那個] *(Request for clarification part2)* 7

(Oh. No, no. You have said that, New Year, and then the other...that one)		
LE:	[呵呵] [摠]	8
	(he he uh)	
<Turn 6> LE:	[中秋節]	9
	(Mid-Autumn Festival)	
<Turn 7> LC:	<u>摠, 這是什麼?</u> (Request for clarification part3)	10
	(Uh, what is that?)	

In contrast to the aforementioned examples, as a multi-unit turn consists of several sentences, different strategies may be employed in one single multi-unit turn. In excerpt 13 below, LE attempted to gain time by repeating her peer's utterance in turn 4. After struggling to plan and deliver her message simultaneously, she ended up using a verbal strategy marker to indicate the following message might not be in an accurate form of the target language and soon attempted to make self-corrections. In this case, three different CSs, namely, time gaining strategies, verbal strategies markers and self-correction, were used in one single turn.

Excerpt 13: Video-based SCMC in English

<Turn 1> LC:	Okay. Umm will want, will you do a postgraduate degree in Law?	1
<Turn 2> LE:	In my↑?	2
<Turn 3> LC:	In Law.	3
<Turn 4> LE:	<u>Urr in Law. Graduate degree. well.</u> (Time-gaining strategies) may be...yes.	4
	I...but I Actually I know really little about law. <u>Like, you know.</u> (Verbal strategy markers) in Taiwan, <u>we use a system of German, we use the</u>	5
	<u>Germany sys. German system of..of law in Taiwan.</u> (Self-correction)	6
	So may be it's best to go to Germany to study Law.	7
		8

This section has described the turn taking systems of text-based and video-based SCMC as a turn is viewed as the basic unit in this study. The analysis to

make the turn taking systems in these two modes of SCMC comparable without too much manipulation of the authentic interaction data is also discussed to ensure a valid comparison between the two modes of SCMC in CS use. In addition, the scheme for counting the number of occurrences of CS use in different turn units is also clarified in this section to allow further analysis of CS use from a quantitative perspective and also to help outline the differences in CS use in the four SCMC settings.

4.4 Summary

This chapter has clarified the coding and the classification of individual CSs through the pilot study. The applicability of the coding categories to the investigation of CS use in the two target languages and in the two modes of SCMC has been verified. Some problematic strategies were carefully distinguished to avoid confusion or overlap with other CSs. In addition, this chapter also demonstrated the analysis to make the different turn taking systems in text-based and video-based SCMC comparable and also the scheme for quantifying CS use to prepare the analysis of the frequency and distribution of used CSs. In employing the research method that has been introduced and reviewed in the previous and present chapters, the results of investigation of CS use in the four SCMC settings will be presented and discussed in the following two chapters.

CHAPTER FIVE: THE USE OF COMMUNICATION STRATEGIES IN THE FOUR SCMC SETTINGS

5.1 Introduction

This study aims to investigate CSs employed by learners of English and learners of Chinese in both text-based and video-based SCMC environments when they communicate with each other as tandem learning dyads in the target language. The investigation is to understand not only the use of CSs in each of the four SCMC settings but also the qualitative and quantitative differences in CS use between the two modes of SCMC and between the two conversational languages through a comprehensive and systematic comparison. The qualitative analysis of interaction data along with learners' reflections in this study reveals how CSs are employed and function in online tandem dyadic interactions, and also offers some explanations of the (in-)frequent use of some particular CSs in the four SCMC settings. While the quantitative analysis provides an overview of the relative frequencies of the occurrence of the different strategies and also their distribution in the different conditions, the MANOVA indicates to what extent these differences are likely to have occurred by chance, even with such a small sample.

Three research questions are entailed in achieving this research purpose. As the three questions involve two levels of investigation, the results will be presented in the two chapters accordingly. This chapter will provide a comprehensive report on the results of investigation into the use of CSs by learners of Chinese and learners of English in text-based and video-based SCMC in response to the first research question. As the investigation pertaining to the first research question is to understand what CSs are employed in the four different SCMC settings, the results will be presented as four parts accordingly: (1) text-based SCMC in English, (2)

text-based SCMC in Chinese, (3) video-based SCMC in English, and (4) video-based SCMC in Chinese. The types and the number of use of CSs in each setting will be outlined through showing the distribution pattern of six types of CS use in that setting and the detailed analysis of how individual CSs were used and subsequently influenced the following turns will be presented according to the six categories. Moreover, learners' conceptions of CS use and some supportive information collected from an after-task questionnaire and stimulated reflection are also discussed along with their use of CSs in experimental interactions to enrich the texture of the analysis. Each participant was required to fill out an after-task questionnaire in order to get some fact-finding information such as what language they used for off-task chat as well as learner's conceptions of CS use such as what attempts they often made to solve the language problems during interaction. In addition, two pairs of participants were asked to provide stimulated reflection to help clarify their use of some particular strategies. Information gathering from an after-task questionnaire and stimulated reflection might be unable to reveal learners' knowledge of each individual CS and are insufficient to study the correlation of learners' conceptions of CS use with their actual use of CSs in interactions, but it could provide a good support to interpret the analysis of CS use and also help code some CSs such as feigning understanding that is difficult to identify in interaction data as they are often used covertly.

Based on the results of the investigation into the use of CSs in the four SCMC settings as elaborated in this chapter, the following chapter will move one step forward to a comparative study in the use of CSs between the two modes of SCMC and between the two target languages, thereby answer the other two research questions, which are to investigate whether learners tend to use CSs differently in

text-based and video-based SCMC, and whether learners of Chinese and learners of English tend to have their own preferences for some particular CSs in SCMC.

5.2 The Use of Communication Strategies in the Four SCMC Settings

The investigation pertaining to the first research question is not only to understand what CSs are used by learners in the four SCMC settings respectively but also to prepare for a four-way comparison. As tandem learning dyads, learners of English and learners of Chinese in this study communicated with each other in their first language and in their learned language respectively in both text-based and video-based SCMC. Each dyad experienced four types of interactions, in which they took turns to be a language learner and a language expert, and their performance when playing the role of learners was explored. In employing the coding categories consisting of a wide range of CSs, each occurrence of CS use was coded in terms of the interactional function in the local sequence environment, the form, and the pragmatic intent of learners. The analysis of individual CSs is elaborated in this chapter to provide a general picture of how individual CSs were used and functioned in each of the four SCMC settings and thereby prepare for comprehensive and systematic comparisons of CS use in different settings. In addition, descriptive statistics and distribution of CS use in each setting are also presented as an overview of the analytic results and also to prepare for some quantitative comparisons.

As there is virtually no study comparing the use of CSs between text-based and video-based SCMC and between learners of English and learners of Chinese before this study was conducted, a pilot study was undertaken to ensure applicability of the coding categories and comparability of the turn taking systems in the two modes of SCMC. Nevertheless, there are still some other challenges when comparing CS use systematically across the four types of interaction. Before pointing out the

challenges, descriptive statistics of learners' overall performance in the four types of interaction are shown in table 6 below. It is noted that, as the form of this table clearly shows the four experimental SCMC settings generated from the operation of the two modes of SCMC and the two target languages, the structure will be used in the following sections to provide a map for this chapter.

Table 6 Descriptive statistics of learners' performance in the four SCMC settings

		Text-based SCMC						Video-based SCMC					
English		(1) Text-based SCMC in English						(3) Video-based SCMC in English					
		(N=7)	Min	Max	Sum	Mean	SD	(N=6)	Min	Max	Sum	Mean	SD
		Turns	12	67	196	28.00	18.762	Turns	80	127	585	97.50	17.120
		Sentences	20	37	197	28.14	7.515	Sentences	71	114	604	100.67	15.908
Chinese		CS Use	4	21	76	10.86	5.728	CS Use	33	67	289	48.17	11.125
		(2) Text-based SCMC in Chinese						(4) Video-based SCMC in Chinese					
		(N=7)	Min	Max	Sum	Mean	SD	(N=6)	Min	Max	Sum	Mean	SD
		Turns	12	37	190	27.14	10.479	Turns	57	114	557	92.83	19.753
		Sentences	19	48	209	29.86	10.961	Sentences	64	130	553	92.17	23.626
		CS Use	5	17	68	9.71	4.386	CS Use	32	76	342	57.00	17.743

As shown in table 6, the numbers of valid participants in video-based and in text-based SCMC settings are unequal, which is consequent on the failure of one tandem learning dyad in recording their interaction in video-based SCMC. Although there is one dyad of participants fewer, the total numbers of produced turns and sentences in video-based SCMC are still much larger than in text-based SCMC. Indeed, it is not surprising that learners were more productive in spoken conversation (video-based SCMC) compared with their own performance in text conversation (text-based SCMC) in terms of produced turns and sentences within 30 minutes of interaction time. The number of learner's turns is almost equal to their interlocutor's turns since it is defined as a sequence of 'floor' shifts between two interlocutors. It is possible that a relatively quiet learner produced a great number of turns as a result of

frequently passing a turn to his/her interlocutor. At this point, learners' produced sentences are presented as supportive information when a turn is still viewed as a basic unit in this study. Sentences generally consist of at least a subject and a main verb in English, while the predicates following subjects could sometimes be replaced with adjectives or nouns in Chinese. In addition, some phrases such as "good morning" were also considered as a meaningful unit as a sentence in this study, although they might not meet the grammatical criteria of sentences. There are two reasons for not taking the number of words into consideration here. Yamada and Akahori (2007) have found that over half amount of talk in video-based SCMC were indeed fillers. Similarly, the present study also found that learners often repeated their own words when planning a proper expression of their intended messages. Another reason involves the inherent difference in Chinese and English. A concept or object might be presented differently in Chinese and in English in terms of the number of words. For example, "computer" in English is one word, but it would be two words in Chinese as it is called "電腦 (electronic-brain)".

In addition to the produced turns and sentences, both learners of English and learners of Chinese also used statistically more CSs in video-based SCMC compared with text-based SCMC. It is noted that the use of paralinguistic strategies cannot be compared between the two modes of SCMC since the sub-strategies under this category are all exclusively used in either mode of SCMC. Mime, including all kinds of gestures and body movements, can only be used in video-based SCMC, while the other strategies that are borrowed from written discourse or utilising the keyboard effects can only be used in text-based SCMC. As no common coding to make a valid comparison of the use of paralinguistic strategies in text-based and video-based SCMC, the number of occurrences of CS use in each SCMC setting as shown in table 6 does not include the use of paralinguistic strategies. The results appear to

broadly indicate that more CSs would be employed in a longer conversation (more turns) in terms of the numbers and even types of CS use as some types might be used so rarely that they would be unlikely to be found in a shorter conversation. It is possible that the overall production and the use of CSs are affected interactively: frequent use of CSs might facilitate more turn taking and more turn taking might demand frequent use of CSs for assistance. Although the real correlation may need further analysis, the challenge of how to make a fair comparison of CS use out of various numbers of turns should certainly be taken into consideration.

The last but very important point to note in table 6 is regarding the standard deviations of performed turns, sentences and CSs. Due to a small sample size, one or two extreme examples could easily cause such variation and thus it seems essential to explore these extreme examples further when presenting the use of CSs in the four SCMC settings respectively.

To move the focus closer to the use of each individual CS, the statistical description of each CS use by both learners of English and Chinese in the two modes of SCMC is presented in table 7 below. A total of twenty-nine individual CSs are investigated in this study, which are classified into six categories according to their functions. The sum in this table refers to the total number of occurrences of each strategy, whereas the mean refers to the average number of each strategy used by individual learners per turn. Therefore, it is possible that two strategies are identical in terms of the total number of occurrences, but are different in the mean per turn due to the difference in produced turns. For example, both strategy A and B were used once in total; nevertheless, as strategy A was used by a learner who produced 67 turns and strategy B was used by another learner who produced 28 turns, the mean per turn of strategy A and strategy B were 0.002 and 0.008 respectively. When learners tended to be much more productive in video-based SCMC than in text-based

SCMC within 30 minutes of time and there seemed to be a correlation between the overall production and CS use, the mean per turn may help the investigation of individual CS use across the four SCMC settings. For example, social formula seemed to be used more densely in text-based SCMC than in video-based SCMC in terms of mean per turn, although the total number of occurrences of social formula in video-based SCMC is still larger than text-based SCMC as most other CSs.

Table 7 Descriptive statistics of CS use in the four SCMC settings

Communication Strategies	Text / English (N = 7)		Text / Chinese (N = 7)		Video / English (N = 6)		Video / Chinese (N = 6)	
	Sum	Mean	Sum	Mean	Sum	Mean	Sum	Mean
(1) Interactional Strategies:								
- Request for Clarification	4	.013	3	.016	3	.006	13	.021
- Confirmation Check	1	.004	2	.013	17	.028	25	.050
- Comprehension Check	0	-	0	-	1	.002	4	.009
- Direct Request for Help	0	-	1	.004	0	-	5	.009
- Indirect Request for Help	0	-	1	.004	7	.012	14	.029
- Input Elicitation Strategies	1	.002	1	.004	67	.119	41	.080
- Feigning Understanding	0	-	0	-	3	.005	1	.003
- Inferential Strategies	13	.065	8	.040	23	.041	2	.003
- Framing	3	.014	7	.039	4	.007	15	.029
- Verbal Strategy Markers	1	.005	0	-	31	.053	14	.031
- Omission	0	-	0	-	1	.002	4	.007
- Time-gaining Strategies	4	.011	1	.004	17	.029	6	.012
(2) Compensatory Strategies:								
- Circumlocution	1	.002	0	-	4	.007	7	.011
- Approximation	1	.002	0	-	2	.004	7	.014
- Use of All-purpose Words	0	-	0	-	0	.000	6	.013
- Literal Translation	1	.008	1	.007	0	-	2	.003
- Self-rephrasing	0	-	0	-	24	.044	22	.045
(3) Reduction Strategies:								
- Message Abandonment	1	.005	0	-	1	.002	2	.003
- Message Replacement	0	-	0	-	2	.004	1	.002
(4) Focus-on-form Strategies:								
- Self-correction	3	.015	6	.025	16	.029	10	.020

- Meta-talk	1	.008	3	.018	8	.015	39	.079
- Own Accuracy Check	0	-	1	.007	3	.006	26	.059
(5) Sociocultural Strategies:								
- Social Formula	25	.168	23	.152	47	.074	32	.063
- Code-switching	16	.088	10	.048	8	.015	44	.071
(6) Paralinguistic Strategies:								
- Mime					4	.008	30	.051
- Use Text/Symbols to Display the Effects of Intonation	19	.071	2	.009				
- Use of emoticons	17	.082	10	.064				
- Punctuation	42	.229	75	.415				
- Substitution	15	.052	0	-				

It is important to note that the statistical description of individual CS use in the four SCMC settings as shown in table 7 is mainly to help the presentation of the qualitative analysis in the following sections. Indeed, the qualitative analysis of how CSs were employed and subsequently influenced the following conversation is the basis for the statistical analysis and is the main focus of this study. The analysis will be elaborated in the following four sub-sections corresponding to the four experimental SCMC settings and then all the important points will be carefully summarized in the end of each sub-section to prepare for comparisons of CS use between the two modes of SCMC as well as between the two target languages.

5.2.1 CS Use by Learners of English in Text-based SCMC

(1) Text-based SCMC in English	(3) Video-based SCMC in English
(2) Text-based SCMC in Chinese	(4) Video-based SCMC in Chinese

This section is to present which CSs were employed by learners of English in a text-based SCMC environment. Seven learners of English contributed their use of CSs in this section. The distribution of the six types of CSs used by these learners in text-based SCMC is outlined in table 8 below. The sum shows the total number of

occurrences of CSs under that category and the proportion represents the percentage of the sum. Finally, the rank of their frequency is clearly marked.

Table 8 The distribution of CS use in English text-based SCMC

CSs Categories (N=7)	Sum	Proportion (%)	Rank
Interactional Strategies	27	15.98	3
Compensatory Strategies	3	1.78	5
Reduction Strategies	1	0.59	6
Focus-on-form Strategies	4	2.37	4
Sociocultural Strategies	41	24.26	2
Paralinguistic Strategies	93	55.03	1

(1) Interactional strategies

As shown in the table 8, interactional strategies are the third most frequently used CSs by learners of English in text-based SCMC, although some interactional strategies were actually used rarely in English text-based SCMC. The statistical description of use of all twelve interactional strategies has been shown in table 7 above (p. 122) and a detailed report on how these interactional strategies were used in English text-based SCMC will be provided below.

Request for Clarification, Confirmation Check, Comprehension Check, Direct Request for Help, and Indirect Request for Help: These five strategies are considered as interactional modification strategies since the use of them requires a response from the interlocutor and often leads to input or output modifications. While the former two are often related to the comprehensibility of input, the latter three are generally connected to the problems of output. Learners of English did not use the three output-related strategies even once in text-based SCMC. According to an after-task questionnaire, only one learner of English did not use online resources such as Google or simultaneous dictionaries in text-based SCMC. The use of online

resources seemed to be a preferred alternative of requesting help either directly or indirectly from their interlocutors. As regards no occurrence of the strategy of comprehension check in English text-based SCMC, it might be a reflection of learners' confidence in their sent message. Five out of seven learners of English reckoned they performed better in text-based SCMC than in video-based SCMC as they had sufficient time to plan and edit their unsent message and also to browse online resources for help. Moreover, they also reported that their level of anxiety in text-based SCMC was lower with more time and less psychological pressure (such as feeling embarrassed), which is consonant with the previous studies (e.g. Chun, 1994; Kelm, 1992; Kern, 1995).

While most learners of English (five out of seven) thought they performed better in text-based SCMC due to the extended planning and editing time and one felt no difference between the two modes of SCMC, only one learner felt less capable of performing in text-based SCMC. This learner did not make any comprehension checks either, which might be related to her attitude toward English typing. She reported that she used MSN daily and her typing speed in Chinese was very fast. Nevertheless, she seemed to avoid typing in English due to the lower typing speed and the concern of making spelling mistakes. Although the questions in after-task questionnaire were posed in English, participants were allowed to fill out this questionnaire in either their first or target language. She was the only one who used Chinese. Moreover, as regards the way to deal with language difficulties, she reported, “MSN 的話就放棄打字，等(my peer)¹繼續打。Skype 的話就換句話說，真的不行就講中文。(If it is in MSN, I would give up typing and wait for my peer carrying on typing. If it is in Skype, I would try to express in another way, or say it in Chinese if there is no other way out)”. Indeed, she often used short responses (e.g.

¹ Her interlocutor's name is hidden here as all participants should remain anonymous.

“Sounds good”) or emoticons (e.g. “XDDDD²”) to pass her turns without forcing herself to perform beyond her capability. Therefore, she might not feel the need to use the strategy of comprehension check. Based on her reflection, the development of typing and literacy abilities seemed essential when preparing learners for text-based SCMC.

In addition to better performance, most learners also reported that they could understand their interlocutors better in text-based SCMC as they could always look back at their interlocutor’s messages and consult online resources for unknown lexical items, whereas they often felt difficult to catch their interlocutor’s speech in video-based SCMC. Abrams (2003) suggested that an easy access to the necessary lexical items might contribute more knowledge to the interaction, and consequently learners’ motivation and attitude toward the task and the target language might be boosted by being more capable of performance in the target language. Indeed, she found that learners who participated in in text-based online discussion performed better in a consequent oral discussion than learners who participated in regular oral discussion. It is noted that the only learner who felt less capable of performing in text-based SCMC pointed out the literacy ability limited her production and also suggested that the concern of lexical (spelling) and grammatical accuracy discouraged her from performing fluently in text-based SCMC³. While both accuracy and fluency are important for learners to develop, this study intends to speculate about whether text-based SCMC has greater potential for developing

² According to Wikipedia, XD is an emoticon used to express happiness or laughing hard. This learner often multiplied D to add the strength.

³ She reported, “用 MSN 比用 SKYPE 還不順，因為 MSN 要打字，不會拼的字就打不出來，也沒辦法比手畫腳讓對方知道。字不會拼起碼還會念，說話的速度也比打字快，而且說話的時候下意識不會這麼顧慮文法的問題。打字的時候就會一直很害怕文法拼字錯誤。(Interaction in MSN is less smothering than in Skype due to the problem of typing. I cannot type the word without knowing the spelling and also cannot use body movement or gesture to let my interlocutor understand me. I could say some words that I did not know how to spell it. Besides, speaking is faster than typing. It seemed subconscious for me to speak without concerning about the problems of grammar, but I tended to worry about making grammar or spelling mistakes when typing.)”

accuracy and video-based SCMC is more effective in developing fluency through comparing the use of CSs between the two modes of SCMC.

Despite the positive effect of relatively extended planning and editing time on the overall performance in text-based SCMC, the delay reply might cause some interactive problems. When Smith (2003a) reviewed the features of text-based CMC in previous research, he pointed out that a slight delay of receiving the sent message still occurs in synchronous text-based CMC and subsequently causes “overlapped” turns. When learners take time to search for online help and edit their unsent message, a longer delay may increase the chance of “overlapped” turns as the interlocutors may assume learners want to pass a turn and thus try to expand their own talk or initiate a new topic. It is noted that although two messages can be typed without being interrupted by each other and then sent out almost simultaneously, only one at a time can appear in text-based CMC interface. As a result, adjacent turns are not always found and more than one topic may be talked about in a parallel way. Along the same lines, Peterson (2006) showed one example of ‘splitting turn’ that one interlocutor responded to his interlocutor’s question and then repeated his own question again in one turn when he assumed his interlocutor had probably overlooked his question due to their prior “simultaneous” typing. Indeed, Peterson’s splitting turn (a multiple-topic turn used to supply additional information and move the discourse forward) and Simpson’s split turn (2002; a message split into parts to hold the ‘floor’) seem related to each other. As shown in excerpt 14 below, the interlocutor’s message at lines 14 and 16-17 appeared to be a two-part message. As the second part of message was cut in by an “overlapped” message from the learner (line 15), the turn has been split into two (turns 7 and 9). Sequentially, turn 9 consists of the second part of LC5’s splitting message (the second part of his message at line 17) and the answer to the question which cut in to his splitting message (lines 18-19).

It is noted that LC5 who played the role of a language expert in this interaction reported that he purposely avoided typing long sentences to keep his sentences clear to the learner, which seemed to explain why he sent his message in parts (lines 4, 5, 7-8, and 9). That is, he might intend to increase clarity of his message rather than to hold the 'floor'. Nevertheless, as the splitting message made the transition point of turn shifts more difficult to be perceived, the splitting and split turns that have just described above actually caused the preceding conversation more confusing.

Excerpt 14: Text-based SCMC in English

<Turn 1> 07:17:13 LC5: so is there a dish that is famous in Taiwan that you really like?	1
<Turn 2> 07:18:21 LE5: small steamed bun	2
07:18:31 LE5: I like it very much	3
<Turn 3> 07:18:41 LC5: I love baozi	4
07:18:49 LC5: with meat inside	5
<Turn 4> 07:19:30 LE5: small steamed bun = xiaolongbao I also like baozi, too	6
<Turn 5> 07:19:57 LC5: I thought it was very difficult to find Baozi in Taiwan! The only place I	7
saw them was in Hualien!	8
07:20:17 LC5: They are so tasty	9
07:21:13 LC5: In Ireland, we have a dish called 'Irish Stew'	10
07:21:32 LC5: its probably my favourite irish dish	11
07:21:40 LC5: have you heard of it?	12
<Turn 6> 07:22:15 LE5: yes, some classes teach about food	13
<Turn 7> 07:22:30 LC5: my dad makes it in winter time	14
<Turn 8> 07:23:09 LE5: so we won't see it in summer time?	15
<Turn 9> 07:23:21 LC5: its very easy to make, just beef soup, pieces of beef, potatoes, carrots	16
and other vegetables	17
07:23:50 LC5: no, because Irish stew is supposed to keep you nice and warm so we	18
mainly make it duting the winter	19
07:24:00 LC5: in summer we eat lots of salads and fish	20
<Turn 10> 07:24:48 LE5: girls here usually eat lots of salad all the time	21
07:25:06 LE5: because they think eating salad can keep thinner	22
<Turn 11> 07:25:35 LC5: yes thats like girls here, but you can also put meat (like chicken or	23
prawns) into it so it tasted really nice!	24
07:26:03 LC5: So you like xiaolongbao? Why do you like this dish?	25

As tandem learning peers, participants in this study tended to wait for their peer's responses patiently to prevent "overlapped" turns. Although LC5 pointed out that "With MSN I felt that the other person was taking longer to answer... maybe because with MSN you can go and consult a dictionary but on Skype you can't!", he still chose to wait for his peer to reply since he thought it would be better than if he typed at the same time and made the conversation look confusing. Therefore, there was more than one minute difference between turns 1 and 2 as shown in excerpt 14 above. Although LC5 waited patiently for the learner to reply, he attempted to give a long message right after receiving the reply. He reported his attempts to lead the talk and provide rich input by raising many questions (as seen in turns 1, 5, and 11) and giving long messages in English conversation when playing the role of a language expert. By contrast, LE5 who played the role of a learner in this interaction reflected that she tried to engineer the interaction through answering her interlocutor's questions and also address parts of the interlocutor's long message to make some response (e.g. the question in turn 8). The delay reply in turn 2 might reflect her concern of translating a Taiwanese food to English as she soon added pinyin (the official system to transcribe Chinese characters into Latin script) to ensure comprehensibility of her message in turn 4. She reported her searching for an appropriate expression of the Taiwanese delicacy on line. Although she had sensed that she relied on her interlocutor to pose questions and provide longer turns during interaction, she did not realize how little she contributed to the conversation until reviewing their interaction. Based on this dyad's interaction and reflection, while the extended processing time might help the quality of learners' performance, it might also unbalance production between learners and native speakers.

As regards the strategies of request for clarification and confirmation check, only two learners of English used them in text-based SCMC. Although the main

function is to improve comprehensibility of input by requesting or eliciting input modifications, the use of these two strategies might also facilitate turn taking as the number of turns was almost certain to be increased by a few extra turns with meaning negotiation that was additional to the main flow of conversation. Moreover, the use of these two strategies might be used by learners to ensure the promptness of their replies. Although learners of English reported the use of online resources could improve their comprehensibility of input, the browsing time might cause their interlocutors waiting for a slightly longer than directly ask their interlocutors for help. In addition, the use of these two strategies might not always be replaceable by the use of online resources. One learner of English explained to her interlocutor that a dish was called “phoenix’s tail”, which is indeed the bottom part of a chicken. Nevertheless, she was confused by her interlocutor’s joke (as seen in turn 8, excerpt 15 below) and tried to request for clarification in the following turn. The request was less likely to get a definition of “last meal” and thus might not be replaced by the use of a dictionary. Similarly, turn 9 in excerpt 16 below seemed to confirm if her interlocutor meant “cookie” rather than ask for a definition of “snack”. Indeed, a group of Taiwanese delicacies are often translated as “snack” in English due to a relatively small serving size. As these “snacks” can often be found in night markets, the fact seemed to strike the learner that “snack” might refer to a different idea she learned in English class, as they were talking about night markets at that moment. The last point to note about the use of confirmation check in tandem learning interaction is using a first language term to confirm the meaning of a second language term. The example can be found in excerpt 1 (chapter 3, p. 72), in which “优酪乳? (Drinking yogurt?)” was used to confirm the understanding of the interlocutor’s description of one particular brand of drink, “Yakult”.

Excerpt 15: Text-based SCMC in English

<Turn 1> LE3: Do you know 凤尾? (<i>phoenix's tail</i>)	1
<Six turns in between>	
<Turn 8> LC3: it's doesn't taste like the chicken's last meal?	2
<Turn 9> LE3: last meal?	3
<Turn 10> LC3: I mean, if you eat it's bottom, can't you taste the last thing the chicken also ate? Hahaha	4 5

Excerpt 16: Text-based SCMC in English

<Turn 1> 08:34:26 LE1: do u like nightmarket?	1
<Turn 2> 08:34:33 LC1: yeah I do	2
08:34:41 LC1: they are so fun!	3
<Turn 3> 08:34:49 LE1: there are lots~~~ of foods	4
<Turn 4> 08:34:59 LC1: hahaha	5
08:34:59 LC1: yeah	6
<Turn 5> 08:35:03 LE1: and they are cheap	7
08:35:04 LE1: ha	8
<Turn 6> 08:35:07 LC1: what is your favourite snack?	9
08:35:12 LC1: haha yeah they are	10
<Turn 7> 08:35:15 LE1: um..	11
<Turn 8> 08:35:19 LC1: that is why they are so delicious!	12
08:35:29 LC1: they are also cheap!	13
<Turn 9> 08:35:50 LE1: what do u mean about snack?	14
08:35:55 LE1: cookies?	15
<Turn 10> 08:36:05 LC1: from the night market	16
<Turn 11> 08:36:07 LE1: ohoh	17
<Turn 12> 08:36:12 LC1: what is your favourite thing to buy	18

Feigning Understanding, Verbal Strategy Markers, and Omission: Although these three strategies do not require an immediate response from the interlocutors, they are considered as interactional strategies due to the function of discourse management and prevention of conversational breakdown. Learners of English did not really use these three strategies in text-based SCMC, which only one occurrence of verbal strategy markers in total. The use of online resources and extended

planning and editing time seemed to reduce the need for markers of verbal strategies to indicate the less perfect target language use or to prepare for repairs. The only example occurred when a learner mentioned a brand of chocolate in her first language. She marked the use of a first language term by “I don't know the english name”⁴. Although this learner knew the imported chocolate might be known differently in English, she decided to use the translated name in her first language rather than search for its name in English on line. While switching to a first language term seemed to help the fluency of her target language message, a verbal marker could signal her interlocutor the strategy use and prevent some possible confusion.

According to the interaction data, the use of feigning understanding was not found in English text-based SCMC. Nevertheless, one learner reflected that she sometimes accepted some ambiguous parts as long as she could get overall meaning as she did not want to interrupt the conversation frequently. Another learner also pointed out that once she did not know all the items listed by her peer, but as she knew her peer attempted to give a list of local delicacy, she just focused on the one she knew and carry on the interaction. While the context of a topic-based conversation often helped overall comprehension of conversation, the use of feigning understanding might indicate a concern about to what extent learners could tolerate ambiguousness.

As regards no occurrence of omission in English text-based SCMC, it might be related to the easy access provided by text-based interaction to look up a simultaneous dictionary for a particular word. More importantly, it perhaps is rather difficult to pretend a word has been said and then carry on the conversation in text-based interaction.

⁴ This chapter quotes a number of participants' speech in the interaction data and also their reflection to describe their use of CSs. Their original speech is put in quotation markers without manipulation, including lower case or upper cases words if it is excerpted from their text-based interaction.

Input Elicitation Strategies, Framing, and Time-gaining Strategies:

According to the previous studies, these three strategies are most likely to be affected by the medium. Both Kost (2008) and Smith (2003b) found a possible effect of text-based interaction on the use of time-gaining strategies, despite a great divergence between their findings. Kost found time-gaining fillers were not used at all in her study and suggested this might result from the awareness of typing time. On the other hand, Smith (2003b) found fillers were used largely and suggested these explicit signals were important to compensate for the lack of nonverbal and paralinguistic cues in text-based interaction. As learners of English in this study did not feel time pressure in text-based SCMC, many of them did not fill the time gaps when planning, typing, and editing the messages. Only two learners of English used time gaining strategies to prevent a long pause during their planning time. One example is shown at turn 2 in excerpt 17 below where LE3 explicitly expressed the difficulty in naming any specialty at that moment. The infrequent use of time gaining strategies in English text-based SCMC seemed to support Kost's suggestion; nevertheless, it is still too early to draw a firm conclusion as the result in Chinese text-based SCMC has not been discussed.

Excerpt 17: Text-based SCMC in English

<Turn 1> LC3: If I came to Taiwan, what would you reccomend me to try?	1
LC3: what's the specialty?	2
<Turn 2> LE3: well.....difficult question XD	3
LE3: we have too much food comes from other country	4
LE3: especially from China	5

As regards the infrequent use of input elicitation strategies in English text-based SCMC, this seems related to the awareness of interacting in a text-based tandem learning environment. With the awareness of typing time, both learners and

their interlocutors tended to wait patiently for a reply. Despite some unintentional occurrences of “overlapped” turns, learners of English often avoided interrupting their interlocutor’s message. A text-based SCMC environment also prevented them from giving a short response such as “uh huh” or “yeah” in the current speaker’s turn space, which is viewed as a continuation signal in face-to-face communication (Schegloff, 1981). Although they could still encourage the continuation by other types of continuation signals or by explicit encouragement, learners of English just did not use input elicitation strategies often, which might be partially affected by the fact that their interlocutors have already provided rich input. Participants tended to produce more output in their first language as they were more capable of expressing in the first language than in the target language. Besides, most of them were well aware of the role as a language expert. Indeed, one dyad even explicitly discussed that they would talk more when taking the role of a language expert. It is noted that most occurrences of time gaining strategies and input elicitation strategies in English text-based SCMC were contributed by the same learner, including three out of four examples of time gaining strategies and the only example of input elicitation strategies. This learner did not rely on her interlocutor as a language tutor to lead the conversation, but tried to talk equally as a friend. Besides, she appeared to be very capable of using various CSs to facilitate the interaction. As a result, this dyad had a fluent interaction without many gaps. Unlike the learner in excerpt 14 (pp. 128-129) who took around one minute to reply, this dyad often sent out their typing in seconds (as shown in excerpt 16, pp. 131-132). With a number of turns that were separated by a “simultaneous” typing⁵, the learner took the greatest number of turns (67 turns, while the average of turns is only 28).

⁵ For example, lines 10 and 12-13 in excerpt 16 should be one message by LC1, while lines 11 and 14-15 should be one message by LE1; nevertheless, due to the simultaneous typing, their messages were split into turns and the adjacent turn did not come across the chat log of text-based SCMC.

According to Smith (2003b), framing might also be affected by the medium. He suggested the use of framing is essential to text-based interaction since interlocutors cannot rely on nonverbal or other paralinguistic cues of the topic shifts as in face-to-face communication. Learners of English did not use it frequently, but their tandem learning partners did. This result is therefore not contrary to Smith's since it was used quite frequently in the whole discourse of English text-based SCMC, although not by the learners.

Inferential Strategies: As the most frequently used interactional strategy in English text-based SCMC, the use of inferential strategies were not often related to language difficulties and consequently less affected by the large use of online resources. According to Rost and Ross (1991), this strategy is often used by learners who have higher proficiency since they can devote more attention to the overall message and formulate discourse-level inferences. Most learners of English in this study appeared to be capable of testing out their assumptions of their interlocutors' messages by questions or statements. One learner guessed that baked beans were probably in cans as her peer offered to send her some by post. To confirm her assumption, she asked "so is that kind of can?" Her question here should bring some new information, regardless of her receiving confirmation or disconfirmation from her interlocutor. Another learner inferred "so it is sweet rice" to confirm her understanding after her interlocutor's description of rice pudding. In this case, her inference was only to confirm old information. According to Farrell and Mallard (2006), the former example is the use of "forward inference" to develop new information and the latter is the use of "hypothesis test" to confirm old information. Both of them seemed to facilitate the conversational flow as they generally elicited more information from their interlocutors, regardless of new or old information.

In sum, text-based SCMC as “conversation in slow motion” (Beauvois, 1998) allowed learners to use online resources and edit their unsent messages without time pressure, which seemed to decrease the use of some interactional strategies, particularly those used to solve language problems when producing output. In addition, interactional strategies such as request for clarification and confirmation check could not be completely replaced by the use of online resources as some situational meaning might still need to negotiate with the interlocutors. Moreover, the use of interactional strategies seemed to help learners engage in a close interaction that also could not be achieved through searching for help from online resources. A number of long time delays of replies might tire the interlocutor and damage the conversational flow. The interactional strategies used to manage the discourse such as time-gaining strategies seemed to be affected by learners’ awareness of interacting in a text-based SCMC environment as well as in a tandem learning relationship. Some discourse strategies such as framing appeared to be used more often by their peers rather than the learners. Finally, inferential strategies were the most frequently used interactional strategy in English text-based SCMC. Although the use of inferential strategies could facilitate the conversational flow effectively, its use might require a higher language proficiency level than the use of other interactional strategies.

(2) Compensatory strategies

Learners of English did not use compensatory strategies frequently to compensate for vocabulary deficiencies in text-based SCMC, which might be related to their preference for consulting online resources. According to their reflection, they tended to look up a simultaneous dictionary or other online resources when encountering problems of lexical deficiencies in text-based SCMC. Besides, as the

suggested topic for English text-based SCMC was food, they often sent links to show their interlocutors pictures of one particular dish to help illustration, which also reduced the chance of using unfamiliar words. As seen in excerpt 18 below, the learner of English did not attempt to explain why he loved fried oyster or to describe the taste, but sent his interlocutor the Google pictures. As both LE2 and LC2 did not attempt to expand this topic further, LE2 was not pushed to produce beyond his proficiency level and thus did not have to rely on the use of compensatory strategies. Indeed, the only three occurrences of compensatory strategies use seemed unconventional. As these examples were not simply to compensate for the lack of vocabulary, it might explain why these examples were not substituted by the use of online resources.

Excerpt 18: Text-based SCMC in English

<Turn 1> LC2: do you like Taiwanese delicacies? you mentioned 鲁肉饭, is that your favourite?

<Turn 2> LE2: 鲁肉饭 is good, I used to like it. But now I love Fried oyster (蚵仔煎) more

LE2: here's some pictures

LE2:

http://www.google.com.tw/images?q=%E8%9A%B5%E4%BB%94%E7%85%8E&oe=utf-8&rls=org.mozilla:zh-TW:official&client=firefox-a&um=1&ie=UTF-8&ei=GVvFS8HAJ5Po7APR97jsDg&sa=X&oi=image_result_group&ct=title&resnum=4&ved=0CB8QsAQwAw

<Turn 3> LC2: thanks

<Turn 4> LE2: you're welcome

Circumlocution, Approximation, and Use of All-purpose Words: These three strategies are often to compensate for lexical deficiencies. The first two strategies were used only once each and the latest was not used at all in English text-based SCMC. One learner of English attempted to describe the appearance of one Taiwanese delicacy (i.e. the use of circumlocution) as her interlocutor seemed confused by the name she just mentioned. At this point, this example might not

simply to compensate for the lack of vocabulary in the target language. The same learner also used a general term “one kinds of bean” for “baked beans” (i.e. the use of approximation) to elicit more information about “baked beans” as she heard it before, but did not really know what it is. This example seemed to result from the unfamiliarity of this object rather than the language problem.

Literal Translation: As all participants know their interlocutor’s first language as the target language, so they could just switch between these two languages instead of literal translation. Only one learner of English used this strategy as he purposely avoided typing any Chinese words in English conversation. This example was less likely to compensate for a vocabulary deficiency, but rather to show his disapprove of its common translation. He put the literally translated term “small eat” into quotation marks and explained “there's no english name for this kind of eating style”. After a brief discussion, he and his interlocutor both agreed that the common translated term “snack” might not completely match with the original concept “小吃” since most Taiwanese have “小吃” as a meal, not between meals.

Self-rephrasing: It is not surprising that no occurrence of self-rephrasing was found in chat logs of text-based SCMC since learners of English edited the unsent messages.

(3) Reduction strategies

Reduction strategies are the least frequent use of CSs by learners of English in text-based SCMC, which only one occurrence in total.

Message Abandonment and Message Replacement: The task allowed learners to have a great extent of control over their own talk based on the suggested topic,

which was carefully selected to encourage learners to share and exchange information relevant to their life experiences. Besides, the use of CSs or other resources could probably help them solve some language problems when delivering their intended messages. As a result, they did not often abandon or replace their message delivery. The only example happened when one learner was asked to give more information about a dish she just mentioned. As seen in excerpt 19 below, the learner of English abandoned her message (line 12) since she was unable to answer her interlocutor's question. An explicit statement to show her incapability seemed to get the learner out of the situation successfully in this case and her attempt at laughing away the feeling of embarrassment seemed to help maintain a social relationship. It is noted that she who was the only learner never used online resources during interaction, which might be part of the reason why she abandoned her message here as what was served in a fried bread bowl was not really difficult to find from online sources.

Excerpt 19: Text-based SCMC in English

<Turn 1> LE7: Do you hear about coffin board in Tainan ?	1
<Turn 2> LC7: no	2
LC7: what's that?	3
<Turn 3> LE7: It's shape like coffin	4
LE7: but It's made for toast	5
LE7: in toast have something	6
LE7: it's tasty, too	7
LE7: and famous	8
<Turn 4> LC7: it's made of toast, yes?	9
LC7: what's inside it	10
<Turn 5> LE7: some things mixed	11
LE7: I don't know how to decribe that haha	12
<Turn 6> LC7: haha	13
LC7: no worries	14

(4) Focus-on-form strategies

Learners of English did not use focus-on-form strategies frequently in text-based SCMC. Similar to some interactional strategies and compensatory strategies, the infrequent use of focus-on-form strategies in English text-based SCMC might be related to their preference for using online resources and editing the unsent messages.

Self-correction: Studies such as Kitade (2000) found that text-based interaction might have positive effects on self-correction and help notice some particular types of mistakes. Nevertheless, as learners of English tended to consult online sources for unfamiliar words and edit unsent messages, they did not make corrections in their sent messages. It is interesting that most typographic mistakes remained uncorrected. Only one learner of English attempted to correct her typographic mistakes and contributed all the three examples of self-correction in English text-based SCMC. The result here appeared to partially agree with the previous studies (e.g. Smith, 2003a) that viewed the acceptance of surface mistakes as a unique feature of text-based interaction.

Meta-talk: The use of meta-talk could indicate the language points learners noticed in their own or their interlocutors' messages. The only example occurred when one learner of English questioned the propriety of translating a Chinese term “小吃” to an English term “snack”. Therefore, he discussed with his interlocutor about the usage of “snack” in English to clarify this point.

Own Accuracy Check: Learners of English did not check their own accuracy with their interlocutors in text-based SCMC; nevertheless, they might have consulted

online resources when they were uncertain about their unsent messages as most of them reported their preference for consulting online resources.

(5) Sociocultural Strategies

The two sociocultural strategies investigated in this study can probably help tandem learning partners who are from different cultural backgrounds establish a positive social relationship. Sociocultural strategies were the second most frequently used CSs in English text-based SCMC. The large use of this type of strategies might just reflect learners' intention to have a positive social interaction with their peers.

Social Formula: Language learners often learn some formulaic chunks to help them develop target-like second/foreign language ability as the memorization of these fixed expressions that often involve social and cultural aspects of a target language use allow them to perform effectively on particular occasions (Ellis, 1994). As learners often learn formulaic chunks in the early stage, all learners of English appeared to be very capable of employing them properly. All of them used social formula for greeting (e.g. "Good morning" and "Hello! how r you doin?") as well as leave-taking (e.g. "see u next time~~~" and "Talk soon!!") in text-based SCMC. In addition, two learners also used this strategy to show appreciation and apology. One learner often thanked his peer for offering corrections. His peer claimed that she only did so when participating in this tandem learning interaction. She usually avoided correcting language forms when interacting with non-native speakers of English unless she could not understand the message or the interlocutor deliberately asked her to do so. The use of social formula in this case might not only help form a positive social interaction but also encourage his peer to provide language corrections by reducing the concern about possible offence. Another learner tended

to talk in a very polite way. She once apologized that she have not tasted one traditional dish from her peer's country by "Sorry I haven't," and then praised "but I suppose it must be a good one". It is noted that the use of politeness is sometimes difficult to distinguish from the use of social formula and thus have been merged into the strategy of social formula in this study (the related discussion is in the chapter 4, pages 95-96). Smith (2003b) suggested the use of polite tone might be a way to ensure the collaborative relationship in sensory restricted text-based SCMC. Peterson (2006) also found that positive politeness could moderate a potentially threatening speech act such as requesting information as well as establish and maintain a positive relationship in an avatar and text-chat-based virtual world. In addition to positive politeness, Peterson (2006) also investigated the use of negative politeness that could show social distance and respect for the interlocutors and attempt to avoid imposition. Peterson's positive and negative politeness is indeed based on Brown and Levinson's politeness theory, which claimed the need for social acceptance and self-determination is one of the conflicting goals of politeness (Kasper, 1997) and thus considered formality as a negative politeness strategy (Murphy & Matas, 2009). Negative politeness behaviours found in Peterson's study included the use of formal language and apologies. From a different perspective, Murphy and Matas (2009) suggested the terms of positive and negative politeness might better be named as relationship-building politeness and respect for the receiver's time and space politeness. The formality (negative politeness) seemed to prevent interlocutors from in-depth conversation as the aforementioned learner who tended to talk very politely appeared to have a superficial and less productive interaction comparing with other learners.

Code-switching: Almost all examples of code-switching in English text-based SCMC were to introduce Taiwanese food as the uniqueness of their first language culture. Most learners showed their abilities to express particular food in English translated names during interaction, which indicated the use of code-switching in most cases was less likely to compensate for the language problems. These examples were likely to avoid the lost in translation as well as show familiarity with their interlocutors due to the assumption that their interlocutors as learners of Chinese might know or wanted to learn some food in Chinese. It is interesting that some interlocutors who are native speakers of English would actively switch code to Chinese if they knew the Chinese names of some particular dishes. In such cases, learners of English would generally switch code to Chinese when mentioning these dishes as well as some other dishes in the following turns. To some degree, the use of code-switching here should help establish or negotiate intersubjectivity, a shared perspective to form a collaborative discourse, from a sociocultural view (Darhower, 2002).

(6) Paralinguistic Strategies

The four paralinguistic strategies used exclusively in text-based interaction are mainly to compensate for the restrictions of written discourse. Learners of English in text-based SCMC used paralinguistic strategies so frequently that its proportion is larger than the sum of all the other five types of CSs (93 to 76 occurrences).

Punctuation and Use of Emoticons: Learners of English used the strategy of punctuation particularly frequently of all the paralinguistic strategies. Most examples of this strategy are the use of question marks and exclamation marks to indicate intonation and express surprise. Only a few examples of ellipsis points to indicate

pause were found in English text-based SCMC. It is noted that question marks associated with a completed question form are not considered as the use of strategy as they are not used specifically to indicate intonation. Indeed, learners of English in this study often used a question mark followed an indicator or a statement rather than a completed question in text-based SCMC as they might want to save some effort of typing or literally reflect their oral expression. For example, one learner typed “last meal?” to indicate a rising intonation instead of asking a full form of question. Learners of English also used exclamation marks frequently to attract attention or express surprise and sometimes they would multiple the marks (e.g. “really!!”) to amplify the effect. It is noted that some learners of English in this study used exclamation marks consistently, but they tended to omit a full stop at the end of a sentence and send out two parts a compound sentence separately without using a comma. Their intentional use of exclamation marks might be supported by the omission of using other types of punctuation. Despite a much smaller number of occurrences compared with the use of question marks and exclamation marks to indicate intonation and express surprise, ellipsis points were also used in English text-based SCMC. They were often used as pause marks such as “well....” or “um...”. In addition, one learner of English has once used ellipsis points extensively to replace a “negative” comment (turn 6 in excerpt 20 below). She did not really give a comment in turn 2 as she might not want to offend her British peer by criticising English food. After her British peer has admitted that English food is quite plain, she still tried to avoid a possible offence by highlighting the following comment was what she heard from other people. Although she did not really say the comment, a degree of intersubjectivity has been established by the context.

Excerpt 20: Text-based SCMC in English

<Turn 1> LC3: The first question is about food in the UK... hmmm... most of my friends from	1
China don't eat English food, hahaha	2
LC3: because they say it's completely flavourless!	3
LC3: 淡味道	4
<Turn 2> LE3: @0@!! ⁶	5
<Turn 3> LC3: I have to agree though, English food is quite plain in comparison to different	6
country's foods	7
<Turn 4> LE3: you know, I have heard sb talk about food of England	8
<Turn 5> LC3: we are the 'potato island', hahaha	9
<Turn 6> LE3: the comment of England food is always....uh.....	10

Not every learner of English in this study used emoticons in text-based SCMC. Besides, the learners who used emoticons tended to use some particular emoticons repeatedly, which seemed reflected their preferences or habits. Indeed, learners of English tended to use emoticons similarly in English and in Chinese conversation, which might also indicate the relation of its use to individual's preference and habit in text-based SCMC, regardless of the language they used.

Use Text/Symbols to Display the Effects of Intonation and Substitution:

Compared with the use of punctuation and emoticon, these two strategies seem more language-specific. Use of substitution such as “u” for “you” (Simpson, 2002; Smith, 2003b) is not really applicable to Chinese conversation since Chinese is an ideographic language and each Chinese character cannot be manipulated as an English word. Similarly, use of text to display the effects of intonation such as capitalizing words for stress (Herring, 2003; Peterson, 2006) or multiplying letters

⁶ @@ represents the rolling eyes and 0 in the middle means a wide open mouth. @0@ could be an emoticon means the feeling of surprised or dizzy. Indeed, the learner also used a similar emoticon in Chinese text-based SCMC. She typed a Chinese character “口 (mouth)” to show a similar emoticon @口@. According to the context, she often used this emoticon to show her surprise. For example, “哇哇 这样你会说几种语言了啊@口@ (wow wow so you can speak how many languages?!)” and “好酷@口@!! (How cool!!)”

for extended sounds (Simpson, 2002; Peterson, 2006) also cannot be employed in Chinese conversation.

Most learners of English did not use substitution frequently. Indeed, most occurrences of substitution (11 out of 15 occurrences) were contributed by the same learner who repeatedly used “u” to substitute “you”, when the other examples, including “n” for “and”, “r” for “are”, and “sb” for “somebody”, were contributed by three different learners. Smith (2003b) suggested the use of substitution might be used to save efforts of typing or to avoid spelling mistakes. As the examples in this study only involved basic vocabulary, these examples were less likely to avoid spelling mistakes. Learners might learn some particular usage somewhere and use it intentionally to be more “native-like”. For example, one learner only used “n” to substitute “and” when mentioning “fish n chips”. In many other cases, he just typed the complete form, “and”.

As regards the strategy of use text to display the effects of intonation, learners of English never capitalized words for stress or multiplied letters for extended sounds as found in previous studies. The suggested topic might decrease the chances to use upper case words for stress. Interlocutors did not really need to emphasis their points when casually talking about the local delicacy and their favourite food. Upper case words sometimes indicate talking louder or even shouting which might sound impolite in conversation. It is noted that although they never multiplied letters for extended sounds in English text-based SCMC, most of them (five out of seven learners) used tilde (~) to indicate extended sounds. For example, one learner of English used “there are lots~~~ of foods”, which native speakers of English often used “there are lotsss of food” instead. As multiplying letters for extended sounds could not be applied to Chinese that is an ideographic language, the symbol tilde (~) or multiplying one Chinese character (one example can be seen in p.

173) is often used to display this effect in Chinese text-based interaction. Learners of English in this study seemed to carry over their habit in Chinese text-based interaction to English text-based interaction. As the symbol tilde (~) to indicate extended sounds was used by both learners of English and learners of Chinese in this study, the strategy was renamed as use text/symbols to display the effect of intonation to include the use of tilde in this study.

Summary

The following are some points summarized from the aforementioned analysis of learners of English employed CSs in text-based SCMC to prepare for a four-way comparison of CS use between the two media and between the two target languages.

- Text-based SCMC allowed learners of English to consult online resources and also edit their unsent messages without time pressure, which seemed to become their preferred alternatives of using some interactional strategies, compensatory strategies, and focus-on-form strategies in text-based SCMC. These infrequently used strategies are mainly to overcome the language problems of self-expression.
- Strategies that are used to negotiate meaning with the interlocutors such as requests for clarification and confirmation check might not always be replaceable by consulting online resources. Interactional strategies seemed to facilitate a close interaction, while the use of online resources might sometimes damage the interaction through delay.
- Inferential strategies and the two sociocultural strategies were the three most frequently used strategies in English text-based SCMC apart from paralinguistic strategies. Inferential strategies seemed effective to facilitate the conversational flow, but its use required a higher level of language proficiency. All learners of

English used social formula in text-based SCMC, which might reflect their intention to form a positive social relationship with their interlocutors. As regards code-switching, the frequent use of this strategy seemed related to the conversation topic when learners wanted to introduce the speciality in their native language.

- The use of paralinguistic strategies seemed related to learners' personal preferences or habits. Two paralinguistic strategies, namely, substitution and use text/symbols to display the effect of intonation, appeared to be language specific.

5.2.2 CS Use by Learners of Chinese in Text-based SCMC

(1) Text-based SCMC in English	(3) Video-based SCMC in English
(2) Text-based SCMC in Chinese	(4) Video-based SCMC in Chinese

This section is to present what CSs were employed by learners of Chinese in a text-based SCMC environment. Although the dyads stayed the same across the four experimental interactions, individual's role as a learner or a native speaker was switched in Chinese and English conversations. Learners of Chinese and learners of English not only produced almost the same number of turns and sentences but also used CSs similarly in text-based SCMC. The distribution pattern of six types of CSs use in Chinese text-based SCMC (as seen in table 9 below) is very similar to the pattern in English text-based SCMC (as seen in table 8, p. 124). The following will give a detailed report of individual CSs used in Chinese text-based SCMC according to the six categories of CSs.

Table 9 The distribution of CS use in Chinese text-based SCMC

CSs Categories (N=7)	Sum	Proportion (%)	Rank
Interactional Strategies	24	15.48	3
Compensatory Strategies	1	0.65	5
Reduction Strategies	0	0.00	6
Focus-on-form Strategies	10	6.45	4
Sociocultural Strategies	33	21.29	2
Paralinguistic Strategies	87	56.13	1

(1) Interactional Strategies

Although interactional strategies were the third most frequently used CSs in Chinese text-based SCMC, some interactional strategies were not really used often. Similar to learners of English, learners of Chinese also reported their preferences for consulting online resources. That is, the possible effect of using online resources on CS use described in English text-based SCMC might also occur in Chinese text-based SCMC.

Request for Clarification, Confirmation Check, Comprehension Check, Direct Request for Help, and Indirect Request for Help: According to an after-task questionnaire, all learners of Chinese consulted online resources during text-based interaction, although one learner emphasized that she only used Google to look for links to illustrate certain points, not a simultaneous dictionary. A written guidance was given to each participant when they agreed to take part in this study, in which they were suggested to interact without the help of a dictionary or translator. This learner tried to carefully follow this suggestion and reminded her interlocutor about it when realizing her interlocutor was using a dictionary. As a result, she seemed to be the only learner of Chinese who ever asked for an explanation of meaning for an unfamiliar phrase in text-based SCMC, while the other examples seemed to occur when learners wanted to react promptly or when the problem was beyond the scope

of a dictionary. As shown in excerpt 21 below, the learner of Chinese just promptly requested clarification (line 6) right after he saw an unfamiliar word in his peer's turn. Nevertheless, as “夏威夷 (xià-wēi-yí)” is a transliterated term, the learner soon guessed it might refer to Hawaii and went on to make a confirmation check (line 7). Both the use of request for clarification (line 6) and confirmation check (line 7) seemed to reflect his thinking process literally. The attempt at typing out his thinking process instead of taking time to think or to consult online resources might just reflect his intention to closely engage in the interaction with his interlocutor and to prevent the conversational breakdown with a quick response. Another example of request for clarification happened when the meaning could only be clarified by consulting the speaker, not other resources. One interlocutor described an unpleasant travelling experience to her peer who is a learner of Chinese. She said, “那时候我看到M就很高兴 (I felt very happy to see M at that time)” as she could not get used to the local food when traveling. M here referred to the giant M sign generally found outside Macdonald's building. As the gap was between the speaker and listener with nothing concerning the learner's language knowledge, the learner of Chinese could only request clarification by typing “M?” Similar to the results in English text-based SCMC, the fact that learners of Chinese preferred consulting online resources might explain the infrequent use of request for clarification and confirmation check (five occurrences in total) and the aforementioned examples seemed to provide indirect supports to such explanation as learners of Chinese tended to use these two strategies when prompt responses were intended or the problems were not caused by learners' inadequate language abilities.

Excerpt 21: Text-based SCMC in Chinese

<2 turns to form a question and answer turn pair about what places LC has visited>

- <Turn 3> LE5: 你去過很多地方！1
(*You have been to a lot of places!*)
LE5: 感覺經驗很豐富2
(*Seem very experienced*)
<Turn 4> LC5: 經驗很豐富！3
(*Very experienced!*)
LC5: 哈哈4
(*haha*)
<Turn 1> LE5: 我只去過美國、日本、韓國、夏威夷5
(*I have only been to USA, Japan, Korea, and Hawaii*)
<Turn 2> LC5: 最後的地方在哪裡？！6
(*Where is the last place?!*)
LC5: 噢 是 hawaii?7
(*Oh it's Hawaii?*)

Learners of Chinese did not use the strategy of comprehension check in text-based SCMC. Most of them felt quite confident of their performance in text-based SCMC as they could take time to think of a word they need and also to consult other resources. Moreover, two learners of Chinese also reported they felt more confident in text-based SCMC than in video-based SCMC since their written skills in Chinese were better than their oral skills. While they were not worried about the comprehensibility of their output, they did not feel the need to check if their interlocutors could understand their messages.

Direct request for help and indirect request for help these two strategies could be substituted by the use of other resources easily. When learners of Chinese reported their preferences for consulting online resources, there was only one occurrence of a direct request for help and one occurrence of an indirect request for help found in their performance of Chinese text-based SCMC. It is noted that the only example of an indirect request for help in text-based SCMC in Chinese seemed

to provide a relatively direct support to a negative correlation by consulting other resources and the use of request for help. One learner described the activity of snorkelling in order to elicit help from his interlocutor. Indeed, the use of indirect request for help was a follow-up attempt since his peer was confused by that he listed “通氣管 (snorkel)” as one of his favourite activities. He explained that he often consulted a dictionary during interaction, but somehow he overlooked the difference between “通氣管 (snorkel)” and “浮潛 (snorkelling)”. That is, his attempt at requesting help indirectly was indeed a follow-up act due to his failure in consulting other resources, when some other successful attempts at consulting other resources to replace the use of CSs left no clue in the interaction data.

Time Gaining Strategies, Input Elicitation Strategies, Feigning Understanding, Verbal Strategy Markers, and Omission: Similar to learners of English, learners of Chinese did not use these five strategies frequently. Indeed, they only used the former two strategies once each and did not use the latter three strategies in Chinese text-based SCMC. Although individual's role as a learner or a native speaker was switched in Chinese and English conversations, the dyads stayed the same across the four experimental interactions. Therefore, it is not surprising that participants also waited patiently for their peer's typing messages in Chinese text-based SCMC as in English text-based SCMC. Some learners of Chinese have apologized in advance for their slow typing speed in Chinese when taking leave in English text-based SCMC and others did so at the beginning of Chinese text-based SCMC. In response to their apology, their interlocutors often showed their understanding with some encouragement (two examples were shown in excerpts 22 and 23 below). It is noted that only two learners of Chinese could read traditional Chinese characters as they studied abroad in Taiwan for one year. Although an

online conversion tool was sent to learners of Chinese prior to the interaction in case they had difficulties reading traditional Chinese characters, many Taiwanese interlocutors attempted to convert traditional Chinese to simplified Chinese for their peers out of courtesy. Accordingly, learners of Chinese such as LC3 showed their appreciation for their interlocutors' consideration (line 4, excerpt 23). As learners of Chinese have spent relatively longer time typing their intended messages and their interlocutors have explicitly showed the understanding in this regard, they did not really use time gaining strategies in text-based SCMC. As a result, only one occurrence of its use was found in Chinese text-based SCMC.

Excerpt 22: Text-based SCMC in Chinese

<Turn 1> LC1: 對不起	1
(<i>Sorry</i>)	
<Turn 2> LE1: 怎麼了?	2
(<i>What happens?</i>)	
<Turn 3> LC1: 我打中文字打得很慢	3
(<i>I type Chinese words very slowly</i>)	
LC1: 哈哈	4
(<i>hahaha</i>)	
<Turn 4> LE1: 沒關係啦~	5
(<i>It doesn't matter~</i>)	
LE1: 我打英文的時候也要想一想 哈	6
(<i>I also need to think while typing in English ha</i>)	
<Turn 5> LC1: 哈哈	7
(<i>haha</i>)	
<Turn 6> LE1: 還常常會拼錯單字	8
(<i>and often spell words wrong</i>)	
LE1: :(9
LE1: haha	10
<Turn 7> LC1: 你讓我覺得好一點!	11
(<i>You make me feel a bit better!</i>)	

Excerpt 23: Text-based SCMC in Chinese

- <Turn 1> LC3: 今天我只能打中文的字，好紧张啊！ 1
(*I can only type in Chinese today, so nervous!*)
- <Turn 2> LE3: 别紧张X D 2
(*Don't be nervous*)
- LE3: 慢慢打没关系X D 3
(*Take your time It doesn't matter*)
- <Turn 3> LC3: 谢谢你用简体字~ 4
(*Thank you for using simplified Chinese~*)

There is only one occurrence of input elicitation strategy use in Chinese text-based SCMC. The effort of typing seemed to discourage learners of Chinese from showing their interests or current state of understanding by a partial repetition of their interlocutor's message (uptaking), although the only example of input elicitation strategies in Chinese text-based SCMC involved such attempt. As shown in excerpt 21 (p. 151), the learner of Chinese echoed part of his peer's comment (line 3). This learner reflected on the attempt and reported that he just could not think of other things to respond at that moment. His attempt was mainly to help him pass a turn and that seemed to compel his peer to take back the turn and give information about her own experience. In addition, learners of Chinese did not give short reactions to elicit more input either, but tended to read their peer's messages patiently in text-based SCMC. Indeed, there are some short responses such as “哦/噢! (oh!)” and also laughter “哈哈 (haha)” found in Chinese text-based SCMC, but they often occurred at a possible ending point or a highlight of their peer's messages. More importantly, learners of Chinese often either expanded the current topic or initiated a new topic right after these short responses. Therefore, these responses did not really elicit input or encourage the continuous talk in terms of both the intention and the effect.

According to the interaction data, no example of feigning understanding was found in Chinese text-based SCMC. Two possible factors might improve the understanding and consequently decrease the need to feign understanding. As learners could easily copy and paste the unfamiliar words from their interlocutor's message to a simultaneous translator and also take time reading the message, their comprehension could probably be improved. In addition, a topic-based interaction might also help them have a discourse level comprehension.

Learners of Chinese did not use verbal strategy markers and omission in text-based SCMC. When they have consulted online resources and edited their unsent message, they did not really need to use verbal markers to indicate a less accurate form or to prepare for repairing. Similarly, the strategy of omission should be less needed when learners could look up a dictionary for one particular term easily. Moreover, it did not seem practicable to "pretend" a word has been said and carry on the talk in text-based SCMC.

Inferential Strategies: Inferential strategies are the most frequently used interactional strategy in both Chinese and English text-based SCMC, despite fewer occurrences found in Chinese text-based SCMC. The use of this strategy seemed to expand the conversation effectively; nevertheless, when inferential strategies require a higher level of language proficiency, not every learner of Chinese showed their capability to use this strategy. As shown in excerpt 24 below, the message (line 2) is indeed an inference made by the learner from his interlocutor's message (line 1). This inference actually led a few more turns away from the topic of travelling and talked about skin cancer as a possible consequence of getting too much suntan. Although most examples of inferential strategies in Chinese text-based SCMC were in a question form, there were still two examples of giving a comment based on the

established knowledge. One learner made a comment, “哈哈. 不能喝到海水！對身體不好！(Haha. Must not drink seawater! Not good for body!)”, in response to his interlocutor’s experience of snorkelling about “真的很好玩. 只是一開始還不太會的時候一直喝到水 (It was really fun. Only at the beginning when I did not know how, I kept drinking water)”. According to his stimulated reflection, although this learner had a good understanding of the proceeding topic, he just could not think of what to say and carry on the topic. So, he just went on to give a comment on his peer’s message in order to prevent the conversation breakdown. The attempt seemed effective in this particular purpose of keeping the conversation flowing. It is noted that this learner is also the one who used input elicitation strategies by echoing his peer’s talk (p. 151). Although both examples of these two strategies occurred when the learner had a difficulty in carrying on the conversation and both attempts effectively helped him keep the conversation flow, these two examples could still be distinguished in terms of the intention as well as the degree of understanding. The example of input elicitation strategies resulted from the intention to pass a turn and let his peer talk more, while the example of inferential strategies occurred when he tried to actively engage in the conversation. This learner admitted he did not know the exact meaning of “經驗豐富 (very experienced)”, although he could have a good guess based on the context and also on his knowledge of the terms “經驗 (experience)” and “富 (rich)”. He only needed to copy his peer’s words with a relatively vague understanding to pass a turn when using input elicitation strategies; nevertheless, he might need to have a good understanding of the proceeding talk and adequate language ability to express his own comment when using inferential strategies.

Excerpt 24: Text-based SCMC in Chinese

<Turn 1> LC5: (3 sent units are omitted)

<Turn 2> LE5: (2 sent units are omitted)

LE5: 不過我幾乎天天曬太陽，所以很怕再曬下去會變很黑 1
(but as I bask in the sun almost every day, so I am afraid my skin tone will become
very dark if I continue to sun)

<Turn 3> LC5: 恩台灣人不太喜歡曬黑了是嗎？ 2
(*Um Taiwanese don't like to get suntan, right?*)

<Turn 4> LE5: 大部分的女生不喜歡曬黑 3
(*Most girls don't like to get suntan*)

LE5: 認為「白」才是美麗 4
(*(they) think "white" is (the symbol of) beauty*)

<2 turns are omitted>

<Turn 7> LC5: 哈哈就是跟我們歐洲人對面的。。。我們愛比較黑的皮膚 5
(*haha it is facing we European...We prefer dark skin*)

<Turn 8> LE5: 這我第一次聽說，原來歐洲的人喜歡曬黑！ 6
(*This is the first time I hear of it, so European like to get suntan!*)

<Turn 9> LC5: 不是對面。。。是相反！ 7
(*Not facing...is opposite!*)

Framing: Learners of Chinese used this strategy quite frequently in text-based SCMC. According to Smith (2003b), the frequent use of framing in text-based interaction might help compensate for the deficit of nonverbal or other paralinguistic cues of the topic shifts by explicitly marking the transitions. As some relevant questions based on one topic were provided in a worksheet to help the conversation, participants in this study often talked about the suggested topic according to the questions listed in the worksheet. As a result, learners of Chinese tended to use “那,” (an equivalent to “so” in English) or “好 (good)” before reading the suggested questions in worksheet or they just simply said “next one” to mark a topic shift. It is worth noting that learners tended to use a capital S and put a comma (“So,”) before introducing a new topic in English text-based SCMC when they did not always capitalize the first word of a sentence. Despite the inherent feature that

Chinese characters cannot be capitalized, learners also tended to insert a comma between “那,” and the introduction of a new topic to clearly mark a topic shift. A similar attempt at attracting the interlocutors’ attention could also be found in video-based SCMC, in which learners would extend the sound of the markers such as “so” and “那” or pause a second before introducing a new topic. From this aspect, the use of a comma in text-based SCMC is likely to represent the effect of intonation as in video-based SCMC. Although reading out the suggested questions could clearly signal shifts of topics in this study, its use was not always considered as the use of framing. When one learner of Chinese has suggested shifting to another topic by “第二个问题吧 (second question ba⁷)”, her interlocutor’s attempt at typing question two in the following turn seemed less functional to signal the topic shift.

It is noted that learners of Chinese tended to use this strategy consistently more often than learners of English in both English and Chinese text-based SCMC, which might indicate that learners of Chinese were more dominant in controlling the conversation pace, regardless of the conversational language. One dyad used to chat before going on the topic-based interaction. The learner of Chinese was always the one who suggested shifting to the suggested topic. She marked the topic shift by “So, shall we start the worksheet about yummy yummy fooood?” in English text-based SCMC and by “对，我们开始吧？(Yeah, let’s start?)” in Chinese text-based SCMC. Another learner of Chinese also reported her attempt at ensuring all the suggested questions would be covered in thirty minutes of time. Although learners of Chinese used framing consistently more often than learners of English in both English and Chinese text-based SCMC, they seemed to be less dominant in Chinese text-based SCMC compared with their own performance in English conversation. Besides, as their Taiwanese interlocutor tended to use framing a bit more in Chinese

⁷ It is a modal particle used in the end of a sentence to indicate a suggestion or a guess.

interaction, the power to manage discourse became more equal between the two tandem learning partners in Chinese text-based SCMC. There was only one dyad where the learner of English and the learner of Chinese used framing as frequently in their target languages, although both of them tended to use framing more often in their first language compared with their own performance in the target language. It is interesting that these two interlocutors interacted so equally that they once used framing together as partners in English text-based SCMC (as seen in lines 3 and 4, excerpt 25 below).

Excerpt 25: Text-based SCMC in English

<14 turns to clarify one object as the learner of English requested>

<Turn 15> LE1: oh~ ok! i got it	1
<Turn 16> LC1: haha cool	2
LC1: ok so	3
<Turn 17> LE1: next one	4
LE1: ha	5
<Turn 18> LC1: are there any local delicacies from your hometown?	6
LC1: hahaha	7

(2) Compensatory strategies

Compensatory strategies were used rarely in Chinese text-based SCMC. There was only one occurrence in total.

Circumlocution, Approximation, Use of All-purpose Words, and Self-rephrasing: These four strategies were not used by learners of Chinese at all in text-based SCMC. The former three strategies were to solve problems of lexical deficiencies when delivering the intended message in the target language. When consulting online resources was reported as a preferred alternative, it is not surprising that learners of Chinese did not use these three strategies to compensate

for the lack of vocabulary when delivering their intended messages in the target language. Many learners of Chinese reported their concern for their slow typing speed in Chinese. They reckoned typing in Chinese was more complicated than in English as they had to select a correct tone for each Chinese character, which they did not have to do when typing in English. The difficulties of typing in Chinese might also discourage them from exemplifying or describing the features of one particular object or action. Consulting a dictionary appeared to be a more economical way for them to solve language problems. As regards the use of self-rephrasing, learners of Chinese did not really need to rephrase their sent messages when they have edited their messages before sending them out.

Literal Translation: As this strategy is also to solve problems of lexical deficiencies, it was not used frequently in Chinese text-based SCMC either. The infrequent use of this strategy might also be affected by the fact that their interlocutors all learned their first language as a target language. Learners of Chinese did not really need to literally translate a term when they could just switch to their first language instead. The only example of this strategy use in Chinese text-based SCMC might result from an attempt to carefully follow the suggestion shown in paired interaction guidance about using the target language mainly without the aid of a dictionary or translator. The learner of Chinese who used this strategy reminded her peer, "我們不應該用字典 (we are not supposed to use a dictionary)", when her peer sent her a translated word found in a simultaneous dictionary as a response to her request for clarification. As her peer preferred to use online resources for more information, she also tried to send her peer some links. She then emphasized that she did not use a dictionary but only some links to help illustrate certain point during the

four experimental interactions when filling out after-task questionnaire⁸. As she did not use a dictionary and also tried to use the target language only, she once used an incorrect term “短半 (shortened half)” as seen at line 9 in excerpt 26 below. According to her stimulated reflection, she tried to translate an English term “abbreviation” into Chinese here. Indeed, the word “abbreviation” does not seem to be literally translatable to Chinese. A commonly known equivalent should be “縮寫”, which may be translated into English literally as “shrunk writing”. Strictly speaking, the attempt of this learner might not perfectly qualify for the use of “literal” translation. Nevertheless, as Kellerman’s (1991) pointed out that the classification of various linguistic realizations is not as important as the characterization of psychological processes underlying CSs for research on the way a target language is acquired and used, the study views this attempt here as one example of literal translation.

Excerpt 26: Text-based SCMC in Chinese

- <Turn 1> LC2: 你去过那些地方? 1
(What places have you been to?)
- <Turn 2> LE2: 我去过马来西亚和日本 2
(I have been to Malaysia and Japan)
- LE2: 你呢? 3
(How about you?)
- <Turn 3> LC2: 听说都是很好的地方。我去过中国、台湾、香港、韩国、美国、瑞士、法国 4
(All these places sound very nice. I have been to China, Taiwan, Hong Kong, Korea, America, Swiss, France)
- LC2: Indonesia 5
- <Turn 4> LE2: 印尼 6
(yìn-ní)
- LE2: Indonesia 是印尼 7
(Indonesia is yìn-ní)

⁸ She reported, “We used google to look for links to illustrate certain points when we were talking in both MSN and Skype”.

LE2: 相当多啊	8
(<i>Quite a lot</i>)	
<Turn 5> LC2: 印度尼西亚 — 你说短半 ?	9
(<i>yìn-dù-n í-xī-yǎ — you said “shortened half”?</i>)	
<Turn 6> LE2: 喔, 不是的	10
(<i>Oh, it's not</i>)	
LE2: 那是简略一点的称呼	11
(<i>That's a brief form</i>)	
<Turn 7> LC2: 对, 我很吉利 (Lucky)	12
(<i>Yeah, I am very “propitious”</i>)	
LC2: 明白	13
(<i>Got it</i>)	
<Turn 8> LE2: 印度尼西亚或印度尼西亚都可以 ⁹	14
(<i>yìn-dù-n í-xī-yǎ and yìn-dù-n í-xī-yǎ are both ok</i>)	
<Turn 9> LC2: 谢谢	15
(<i>Thanks</i>)	
<Turn 10> LE2: 妳很幸運	16
(<i>You are very lucky</i>)	
<Turn 11> LC2: 好的, 我总是忘了怎么说	17
(<i>Yes, I always forgot how to say it</i>)	
<Turn 12> LE2: 没关系	18
(<i>It doesn't matter</i>)	

(3) Reduction strategies

As the least frequently used CSs in Chinese text-based SCMC, both reduction strategies were not used even once.

Message Abandonment and Message Replacement: Despite the possibility of abandoning unsent messages, learners of Chinese did not abandon or replace their messages in text-based SCMC. In addition, most participants in this study¹⁰, including both learners of English and learners of Chinese, claimed that they seldom

⁹ The excerpt is taken from the original chat log without altering. According to the content, the interlocutor probably meant to say 印度尼西亚 and 印尼 are both ok.

¹⁰ According to an after-task questionnaire, only one learner reported she gave up easily due to language problems, when the rest of them claimed they never or occasionally gave up when communicating in the target language.

gave up their messages due to language difficulties, which seemed to be supported by the result that reduction strategies were the least frequently used CSs by both learners of English and learners Chinese in text-based SCMC. Finally, as suggested in the section of English text-based SCMC, the infrequent use of reduction strategies might also be related to the task and the medium. As learners could control their own talk, they might avoid talking about something they were unfamiliar with at the first place. The extended processing time in text-based SCMC allowed them to consult a dictionary for their language problems when delivering their intended messages and thereby decreased the use of reduction strategies.

(4) Focus-on-form strategies

The use of focus-on-form strategies often reflects learners' concern about producing more accurate forms in meaning oriented conversation. Although focus-on-form strategies are the fourth most frequently use CSs in both English and Chinese text-based SCMC, learners of Chinese actually used these strategies twice more than learners of English (10 occurrences versus 4 occurrences). The following will describe the use of individual focus-on-form strategies in Chinese text-based SCMC.

Self-correction: Three out of six occurrences of self-correction were to correct the selection of a tone¹¹. For example, one learner typed “你還會像(xiàng)在

¹¹ There are four tones in Chinese. According to the Wikipedia (<http://en.wikipedia.org/wiki/Pinyin#Tones>), the four tone marks shown in the pin-yin system are: (1) the first tone (Flat or High Level Tone) is represented by the symbol of (¯) added to the pinyin vowel; (2) the second tone (Rising or High-Rising Tone) is denoted by the symbol of (´); (3) the third tone (Falling-Rising or Low Tone) is marked by the symbol of (ˇ); (4) the fourth tone (Falling or High-Falling Tone) is represented by the symbol of (`). In addition to the aforementioned four tones, there is also a neutral tone that is represented by a normal vowel without any accent mark. A neutral tone can only be pronounced with other words, but cannot be pronounced as a word alone. At this point, the four tones of Chinese is commonly known instead of the five tones.

去夏威夷嗎？(Do you still feel like being go to Hawaii?)¹²”, which he soon made a correction, “想(xiǎng)再去* (want to go again*)”. Indeed, this learner corrected two mistakes at once. Another mistake involves homophonous, “在” and “再”. They both pronounce as (zài), but “再” means again and “在” means to be present or to be the process of. These two are actually an easily confused pair in Chinese. Another learner in this study also corrected the exactly same type of mistake.

One point is noted about the relation of typing in Chinese to self-correction. When typing a Chinese character generally involves selecting a correct tone and then selecting an intended word from a list of homophonous words, some people might attempt to speed their typing by paying less attention to the word selection. As a result, a typed sentence might be understood according to the reading sounds, but actually contained some homophonous mistakes. Such mistakes in a text-based SCMC interface are often accepted by native speakers of Chinese, which seemed to be similar to a simplified register, in particular the acceptance of surface errors, as observed by Murray (2000). As long as interlocutors could understand each other, they generally leave these homophonous errors uncorrected. Moreover, one or two lexical mistakes could easily be repaired by a recipient based on the context. When one learner of Chinese apologized for selecting a wrong tone, his interlocutor responded “沒關係. 我看得懂 (No problem. I can understand)”. Nevertheless, if the interaction is to facilitate target language acquisition, the acceptance of surface errors might need to be avoided.

Although most self-corrections were to correct typographic mistakes, some corrections seem to reflect their awareness of a more precise L2 term. Two learners of Chinese attempted to correct “在” and “再”, which might reflect their awareness of a distinction between this easily confused pair. In addition, one learner was aware

¹² According to the result of self-correction, he meant to ask if you still want to go to Hawaii again.

that the term “相反” was closer to his intended meaning and thus made a self-correction to it (as seen at line 7 in excerpt 24, p. 157). Indeed, both “對面” and “相反” could be translated to “opposite” in English. Nevertheless, while the former term means the position of two objects being face to face, the latter term means the contrary.

Meta-talk: Learners of Chinese sometimes had meta-talk about a particular language usage they noticed in conversation, which might reflect their learned language knowledge. One learner of Chinese reviewed one section of her interaction (as seen in excerpt 27 below) and recalled her concurrent thinking during interaction. She reported that she did not really know the phrase she noticed in her peer’s message, but she remembered her Chinese teacher told her native speakers of Chinese like to use a four-word idiomatic phrase. Therefore, she tried to confirm her learning (turn 2) before requesting clarification (turn 5).

Excerpt 27: Text-based SCMC in Chinese

- <Turn 1> LE2: 我认为旅行是一种很好的体验, 藉由这样的体验, 旅行中的人可以增广见闻. 1
(I think travelling is a very good experience, through such experience, the travellers can broaden their horizons.)
- <Turn 2> LC2: 最后四个汉字是成语吗? 2
(Are the last four Chinese characters an idiomatic phrase?)
- <Turn 3> LE2: 對 3
(yeah)
- LE2: 不不 4
(no no)
- <Turn 4> LC2: 意思是什么? 5
(What does that mean?)
- <Turn 5> LE2: 应该说是一种惯用语 6
(Should say it's one kind of commonly used word)
- <Turn 6> LC2: 好的 7
(ok)

(Broaden your horizon should be equivalent to broaden vision in English)

Own Accuracy Check: There is only one occurrence of own accuracy check in Chinese text-based SCMC. As seen at line 12 in excerpt 26 (p. 162), the learner of Chinese meant to say she is lucky; nevertheless, as she was unsure if “吉利” is equivalent to “lucky”, she added “(lucky)” to the end of the message to check the accuracy. As mentioned early, she was the only learner of Chinese did not consult a dictionary, which might be the reason why she was the only one check the accuracy of one particular word in Chinese text-based SCMC.

(5) Sociocultural Strategies

Sociocultural strategies were the most frequently used CSs in Chinese text-based SCMC, except for paralinguistic strategies.

Social Formula: The strategy of social formula was used by all learners of Chinese in text-based SCMC. They usually used this strategy for greeting and leave-taking. In addition, they also used this strategy to appreciate all kinds of help from their interlocutors and to apologize for their inadequate language ability or slow typing speed. Learners of Chinese seemed to use this strategy in the same way as learners of English in terms of its social purpose. Indeed, most participants in this study, including learners of Chinese and learners of English, mentioned in an after-task questionnaire about their intention to be polite. The use of social formula seemed to help them with the goal and develop a positive social interaction. Although most of them intended to be polite, their expressions seemed to be affected by their assumptions of oral culture of the target language. One learner of Chinese greeted his interlocutor with a simple “Hi” and then suggested moving on to

topic-based interaction (as seen in excerpt 28 below), but he greeted with a polite formula ”你好 ! (How do you do?¹³)” followed by another two turns for the same purpose in Chinese interaction (as seen in excerpt 29 below). The relatively more polite greetings in Chinese interaction might reflect his assumption of proper Chinese oral custom. In addition, as learners might not be fully aware of the target language cultural norm, they tended to learn from native speakers of the target language. One learner of English reflected that “I will use some polite way such as “could” sometimes, and I notice that they (native speakers of English) like to say hi at the beginning of conversation and they usually give some positive responses when people describe or say something, therefore, I think I mimicked those features I observed.” As most participants had previous experience of interacting with native speakers of their learned language, they might just imitate what they observed from the previous experience without having a clear view of the target language cultural norm.

Excerpt 28: Text-based SCMC in English

- | | |
|--|---|
| <Turn 1> LC5: Hi, (LE's name). | 1 |
| <Turn 2> LE5: Hi~ | 2 |
| <Turn 3> LC5: would you like to start the questions? | 3 |

Excerpt 29: Text-based SCMC in Chinese

- | | |
|--|---|
| <Turn 1> LC5: 你好 !
(How do you do?) | 1 |
| <Turn 2> LE5: 你好 :)
(How do you do?) | 2 |
| <Turn 3> LC5: 希望你今天好 !
(Hope you are well today!) | 3 |
| <Turn 4> LE5: 我今天很好 , 希望你今天也過得好 | 4 |

¹³ The term “你好!” is generally translated as “How do you do?” or “How are you?” in English, although a literal translation is “You good!”.

- (I am fine today, hope you are well today as well)*
- <Turn 5> LC5: 過得不錯 ! 5
- (Not bad!)*
- LC5: 那我們開始吧?! 6
- (So shall we start?!)*

In addition to learners' assumption or observation of target language oral culture, learners' personal concerns seemed to affect the use of social formula as well. One learner of Chinese reflected that she used informal greetings purposely since she thought this was not a formal meeting. Therefore, she chose to simply say "hi" in English interaction and an equivalent, "嗨 (hi)", in Chinese interaction. It is interesting that her interlocutor also performed consistently in English and Chinese interactions due to the intention to use "the greetings that might be appropriate for my peer". She greeted with "How r you doin?" in English interaction and "你最近过得怎样 (How are you doing recently?)" in Chinese interaction. Another learner of Chinese expressed her concern about still being largely unaware of Chinese oral culture and thus attempted to use the polite formula she knew as many times as she could. Therefore, she tended to use "謝謝 (thank you)" more frequently in Chinese interaction, while she just responded by "yeah" or "ok" for similar situations in English interaction. Based on these reports, it seemed that learners tended to use social formula to keep a positive face toward their interlocutors. Nevertheless, the degree of politeness might be affected by their assumption or observation of target language oral culture as well as some personal concern.

Code-switching: The fact that all participants in this study knew their interlocutors' first language as their learned language allowed them to use code-switching to communicate more effectively. Learners of Chinese used a first language term in second language speech to present a concept or object closely

related to the first language culture as most examples in English text-based SCMC, and also for other different functions. Learners might switch code to emphasize their points. One learner of Chinese commented, “那挺好的！nice manager! (That is quite nice!)”, in response to her interlocutor’s story about a manager her interlocutor met. As this learner could easily copy the equivalent word for manager in Chinese from her interlocutor’s talk, the possibility of using a first language word to compensate for the problem of vocabulary deficit seemed very slim. The use of code-switching in this case seemed to highlight what she thought was nice in her comment. In addition, some examples of code-switching seemed to be triggered by their interlocutors. For example, one learner of Chinese typed “哈哈 yeah (Hahaha)” in response to her peer’s exclamation, “all right”, in Chinese text-based SCMC. The use of code-switching might sometimes involve the use of a third language. One learner of Chinese attempted to employ humour by switching code to “a third language”. She responded “oh la la! 我不會說法語，哈哈 (I cannot speak French, haha)” when hearing her peer has learned French.

Although few examples of code switching found in Chinese text-based SCMC seemed to compensate for vocabulary deficiencies in the target language, this study did not intend to distinguish the use of first language to compensate for the language problems from code switching for social purposes due to the difficulty to have a clear distinction. If self- or other- repairs occurred right after the use of first language, it seemed less problematic to define as a strategy to solve the language problem. As shown in excerpt 29 below, the use of a first language term in a second language speech (line 2) was most likely to compensate for the lack of vocabulary in the target language according to the learner’s reaction to the repair provided by her interlocutor (line 4). Apart from the repair act, the purpose of using a first language term in a second language speech was not always easy to tell.

Excerpt 29: Text-based SCMC in Chinese

- <Turn 1> LC2: 很好，所以去旅行时，拿什么重要的东西？ 1
(*Very good, so what are important things to bring when travelling?*)
(Three turns in between)
- <Turn5> LC2: 我觉得一样， 还有很重要拿照相机和 First Aid Kit 2
(*I think the same, and it is very important to bring a camera and First Aid Kit*)
- <Turn 6> LE2: 急救箱 3
(*First aid kit*)
- <Turn 7> LC2: 对对 4
(*Yes yes*)

Some English words have also been used by more and more Taiwanese in oral Chinese conversation, which might cause a new problem of identifying the use of code-switching. When native speakers of English mentioned these borrowed terms in Chinese speech, it was difficult to tell if learners simply used their first language or they switched code due to the familiarity with the pop culture corresponding to the target language. Moreover, the use of a borrowed word might cause a mismatch between the coding in text-based SCMC and in video-based SCMC. One learner, who has studied abroad in Taiwan, commented “那邊的人都很 cool (people there are all very cool)” when talking about her travel experience. The term “cool”, which is used to show approval when you think someone or something is fashionable, attractive and often different, has been borrowed into Taiwanese Chinese and written as “酷 (kù)” due to its similar pronunciation. In a text-based SCMC interface, this example was considered as the use of code-switching since it was typed in English, while the use of “掰掰 (bāi-bāi)” or “拜拜 (bài-bài)” in Chinese interaction was considered as the use of borrowed words, “bye bye”, as the term was typed in Chinese. Nevertheless, such distinction was not really applicable in oral conversation. In addition, some borrowed words such as “pizza” was written as “比薩 (bǐ-sà)”, but generally read “pizza” instead of “bǐ-sà” by most Taiwanese

as well as the TV commercials. These examples were also difficult to define as the use of first language, the use of code-switching, or the use of borrowed words in tandem learning SCMC. Although the difference did not really affect the interaction, it might still need a consistent coding method to ensure the fairness to compare the results in text-based SCMC and video-based SCMC.

(6) Paralinguistic strategies

The following four paralinguistic strategies can only be used exclusively in text-based SCMC, but not in video-based SCMC. Although paralinguistic strategies were the most frequently used CSs in Chinese text-based SCMC, some usages described in the previous studies (e.g. Peterson, 2006; Simpson, 2002; Smith, 2003b) cannot really applied to Chinese conversation.

Punctuation: Learners of Chinese used this strategy particularly frequently compared with other CSs. Although they used question marks frequently, most occurrences could not be considered as the strategy use since these question marks were not used to specifically indicate the intonation. There were only a few examples of using question marks extensively to indicate intonation such as “你去过了香港？ (You have been to Hong Kong?)”. Most examples of this strategy use were the use of exclamation markers to express surprise (50 occurrences) and almost half amount were made by one learner (24 occurrences). This learner did not realize that he used exclamation marks so frequently until the stimulated reflection. He could not explain why he used exclamation marks particularly frequently, but recalled he did the same in his first language writing. His reflection was confirmed by his performance in the previous English text-based SCMC and also the emails he sent to the researcher in English. This example indicated that learners might carry from his first language habits into second language interaction. Another finding to support the possibility of

carrying over first language habits to second language interaction was that some symbols seemed to be used more commonly by either learners of Chinese or learners of English. Learners of Chinese often used asterisk (*) to mark their corrections in Chinese interaction as they generally did so in their first language, English, while learners of English never used asterisk (*) in both English and Chinese interactions. On the other hand, learners of English often used tilde (~) to indicate extended sounds in Chinese text-based SCMC and carried from this habit to English text-based SCMC, while most learners of Chinese seemed unfamiliar with this use.

Use of Emoticons: In addition to the use of punctuation, learners of Chinese also tended to use emoticons similarly in their first language and target language interaction in terms of frequency and the type. They tended to use some particular emoticons they preferred repeatedly. According to Wikipedia, there are western style and Asian style of emoticons. Basically, emoticons in western style need to be viewed by titling one's head to the left, while Asian style has an upright viewing format. Learners of English in this study tended to use Asian style of emoticons such as “^^” or “@@” more frequently than western style, while learners of Chinese only used western style of emoticons such as “:)” or “:P”. Although learners of English and learners Chinese seemed to have their preferred styles, the difference did not seem to cause confusion as both styles have been accepted commonly in the culture of text-based interaction. “Ideographic emoticons”, on the other hand, might cause some confusion since they are closely related to one particular language. One Taiwanese participant used emoticon “囧”, which most learners of Chinese seemed unfamiliar with. It is originally a Chinese character. As it is pronounced the same as “窘 (embarrassed)” and looks like a frowning face, it is getting popular to be used as a emoticon for being embarrassed in Chinese community. Nevertheless, this

emoticon does not seem widespread outside a Chinese community as it cannot be adopted by users who are unable to type Chinese characters. At this point, the use of emoticon “囧” or other ideographic emoticons might cause learners’ confusion, especially if they looked up a dictionary for this word and adopted its original meaning.

Use Text/symbols to Display the Effects of Intonation: The use of text/symbols to display the effects of intonation tended to be affected by the language used in conversation. Multiplying letters (ex. soooooo cute) for extended sounds or capitalizing words for stress can only be applied in English interaction, but not in Chinese. Native speakers of Chinese in this study tended to use tilde (~) or repeat one particular word (e.g. “回头发现 怪老头追上来啦¹⁴啦啦啦啦啦！！ Q □ Q¹⁵ (when I turned around, I found the weird old man caught up with me lalalalalala!!)”) to display the effect of extended sounds. Despite no example found in this study, separating each word is one way to express stress in Chinese text-based interaction. Taiwanese participants in this study never separated each word to express stress when communicating with their peers as it might sound rude sometimes. Learners of Chinese did not use this strategy frequently since they were probably not familiar with the aforementioned ways used in Chinese interaction. Besides, unlike learners of English who could use tilde (~) for extended sounds instead of multiplying letters in English interaction, learners of Chinese could not really transfer their first language habits such as capitalizing a word to the Chinese interaction. As a result, only two learners of Chinese used tilde (~) for extended

¹⁴ “啦” is a sentence-final particle indicating exclamation.

¹⁵ An emoticon means crying. The emoticon here might not simply to compensate for the unavailability of facial expression at this particular moment, but also to give a vivid account of the story. Indeed, some learners tended to use some exaggerative emoticons that they were too shy to express in the same way in video-based SCMC. They seemed more relaxed when expressing themselves in text-based SCMC.

sounds once each. One of them might have learned its use when his studying abroad in Taiwan, while the other might have picked up its use from her interlocutor since her interlocutor used it several times in previous English interaction (the example can be seen at line 4 in excerpt 23, p. 154).

Substitution: The use of substitution tended to be affected by the language as well. Substitutions such as “u” for “you” are not applicable in Chinese interaction since Chinese is not an alphabetic language. On the other hand, learners of Chinese probably did not know how to use initials (consonants) in Zhuyin¹⁶ to substitute Chinese characters (ex. “ㄈ” for “呵[ㄏ]”) as many Taiwanese do in Chinese interaction. Although Taiwanese participants used this kind of substitution occasionally in this study, it was difficult for learners of Chinese to imitate its use when they had no knowledge of Zhuyin. Most of them were taught Hanyu Pinyin (the romanized Zhuyin used in China) instead of Zhuyin when learning Chinese. As a result, learners of Chinese never used this strategy in Chinese text-based chat.

Summary

Learners of Chinese and learners of English tended to use CSs similarly in text-based SCMC in terms of the distribution patterns of six types of CS use. Both groups of learners tended to use some CSs such as reduction strategies rarely in text-based SCMC. A possible effect of consulting online resources and editing unsent messages on the use of some particular interactional strategies and compensatory strategies was also found in both English and Chinese text-based SCMC, when some other CSs such as requesting clarification of a situational

¹⁶ Zhuyin is for children to learn pronunciation and then they would be capable of self-learning by reading children’s books written in Chinese characters along with Zhuyin and by looking up a dictionary. Other than these two resources, Zhuyin would not be presented in most written resources.

meaning or something beyond the scope of a dictionary might not be replaced easily by the use of other resources. Promoting a close interaction appeared to be an additional benefit of using some particular CSs.

Despite the aforementioned similarities, some differences were revealed when moving the focus closer to each individual strategy. The section summary below will list some important points found in Chinese text-based SCMC to prepare for comparisons of CS use between the two modes of SCMC and between the two target languages later.

- The use of inferential strategies seemed related to the level of language proficiency. Although it was also one of the most frequently used CSs in Chinese text-based SCMC, not every learner of Chinese showed their capability of using this strategy.
- Learners of Chinese used the strategy of framing consistently more than learners of English in both English and Chinese text-based SCMC. They seemed to dominate the conversation pace by signalling and marking topic shifts, regardless of the conversational languages.
- The use of focus on form strategies by learners of Chinese in text-based SCMC did not only show their concern for accurate form use but also reflected their learned knowledge of Chinese language. In addition, some mistakes might result from the relatively complicated typing method in Chinese (the need to select a correct tone and then select an intended word from a list of homophonous words). The corrections of tonal mistakes often reflected learners' awareness of using a correct tone in Chinese.
- Learners of Chinese used social formula largely due to the intention to keep a positive face toward their interlocutors; nevertheless, the degree of politeness

might be affected by their assumptions of Chinese oral culture as well as some personal concerns.

- Learners of Chinese used code switching for various purposes such as showing the uniqueness of their native culture, emphasising a point, and expressing humours. In addition, as a clear distinction was rather difficult to draw, this study did not distinguish the use of first language to solve language problems from the use of code switching for social purposes. There are few examples which might be used due to a vocabulary deficiency.
- Learners of Chinese seemed to carry over their habits of using paralinguistic strategies in English interaction, which is their first language, to Chinese interaction, although Chinese language sometimes restricted such transfer.

5.2.3 CS Use by Learners of English in Video-based SCMC

(1) Text-based SCMC in English	(3) Video-based SCMC in English
(2) Text-based SCMC in Chinese	(4) Video-based SCMC in Chinese

This section is to present what CSs were employed by learners of English in video-based SCMC. While learners in this study tended to use online resources as a preferred alternative of using CSs in text-based SCMC, interaction in a video-based SCMC environment seemed to compel them to rely more on CSs due to a relatively short processing time. Accordingly, learners of English used more CSs in video-based SCMC compared with their own performance in text-based SCMC in terms of the number and also the types. The distribution of the six types of CS use in English video-based SCMC is shown in table 10 below followed by a detailed report of each individual CS use in English video-based SCMC.

Table 10 The distribution of CS use in English video-based SCMC

CSs Categories (N=6)	Sum	Proportion (%)	Rank
Interactional Strategies	174	59.39	1
Compensatory Strategies	30	10.24	3
Reduction Strategies	3	1.02	6
Focus-on-form Strategies	27	9.22	4
Sociocultural Strategies	55	18.77	2
Paralinguistic Strategies	4	1.37	5

(1) Interactional strategies

As seen in the table 10 above, learners of English used interactional strategies largely in video-based SCMC. Its use accounts for almost 60% of all CSs use. The heavy use of interactional strategies might just reflect they engaged in social interaction more closely in a video-based SCMC environment with less distractions from consulting other resources. While all of them preferred consulting online resources in text-based SCMC¹⁷, half of them reported the incapability to do so in video-based SCMC due to the time pressure. One learner described the pressure of manipulating all available resources, including CSs, to achieve a mutual understanding with their interlocutors within limited time in a video-based SCMC environment as, “It’s like put all your learnings into tests”.

Although learners of English used almost all interactional strategies in video-based SCMC, they tended to use some strategies far more frequently than the others. Five the most frequently used interactional strategies shown in a descending order are: input elicitation strategies (67 occurrences), verbal strategy markers (31 occurrences), inferential strategies (23 occurrences), time gaining strategies (17 occurrences), and confirmation check (17 occurrences). Input elicitation strategies were indeed the most frequently used CS among all six types of CSs in English

¹⁷ The only learner of English who did not use online resources in text-based SCMC was an invalid subject to be analysed in this section since she failed to record her interaction in video-based SCMC.

video-based SCMC. The following will provide a detailed analysis of individual interactional strategies use in English video-based SCMC.

Request for Clarification, Confirmation Check, Comprehension Check, Direct Request for Help, and Indirect Request for Help: These five interactional strategies are mainly to improve the comprehensibility of input or output. The former two are often related to input modifications, when the latter three are related to output modifications. Learners of English only used confirmation check frequently in video-based SCMC, but not the other four strategies. The frequent use of confirmation check by learners of English in video-based SCMC might be related to the learners' listening ability and also to the reception problem of video-based SCMC. Most learners of English reckoned they were less capable of understanding their interlocutors in video-based SCMC than in text-based SCMC due to a relatively fast oral speech, although a couple of learners noted that their interlocutors' facial expressions and gesture could sometimes help their comprehension. Accordingly, they often asked questions such as "Do you mean...?" or "..., is that what you mean?" to confirm their understanding as well as their hearing. Moreover, their interlocutor's fragmental talk as well as unstable reception in video-based SCMC might also increase the need to make a confirmation check. As seen in excerpt 30 below, the interlocutor gave a relatively long talk and then attempted to shift the topic by asking the learner of English a question in turn 13. This question sounded a bit fragmented as the speaker seemed to say and plan his message simultaneously, which might explain why a confirmation check occurred in the following turn (line 14).

Excerpt 30: Video-based SCMC in English

<Turn 1> LC5: (A response to the previous topic is omitted.) When I was in Taiwan, I really	1
wanted to urr you know skydiving?	2
<Turn 2> LE5: ((A facial expression indicates she was thinking during a short pause)) Sky what?	3
<Turn 3> LC5: Sky skydiving ((gesture to help the illustration)) like you jump out of an airplane↑	4
Yeah.	5
<Turn 4> LE5: Ok, I know that.	6
<Turn 5> LC5: Yeah? Have you done that?	7
<Turns 6-12 are omitted>	
<Turn 13> LC5: And urr urr I wanted to go you know do something exciting↑, so urr somebody	8
asked me why don't we go skydiving ((with gesture)). Umm so..yeah I said why	9
not. So we went skydiving. Umm it's it's kind of addictive. Umm when I was	10
in Taiwan, I wanted to find somewhere to do skydiving, but urr in the end I just I	11
didn't find anywhere, so urr I didn't do it, again. So..Yeah, so have you urr	12
where where have you been to, outside of Taiwan?	13
<Turn 14> LE5: In urr in another country I travelled before?	14

There are two examples of confirmation check which seemed to be used beyond its primary purpose of checking the correctness of one's understanding and hearing. The two examples were found in two different learners' interaction data and one of them is shown in excerpt 31 below. The learner might be distracted by the overlapped talk (as seen in brackets at line 1 and line 2) and thus attempted to confirm her hearing in turn 3. Regardless of the cause, her expression showed that she was surprised by an unexpected answer to a certain extent and she soon illustrated the situation further to ensure her interlocutor's answer was based on a good understanding. On the other hand, her interlocutor asked in reply (turn 4) might just reflect the notice of the implied real meaning. Indeed, a story in a different direction from her first answer was provoked by the learner's further illustration. The

example here seemed to suggest a function of showing surprise on top of getting confirmations of one's understanding and hearing.

Excerpt 31: Video-based SCMC in English

<Turn 1> LE1: So uh huh so do you use cell phone during the class?...[You know just..] 1
<Turn 2> LC1: [No, no.] 2
<Turn 3> LE1: No? You can't use cell phone...during the class? [You know...umm] 3
<Turn 4> LC1: [Can you?] 4
<Turn 5> LE1: Umm sometimes you just haa you know haha. put the cell phone under desk. 5
<Turn 6> LC1: Oh, yeah, yeah. Use quietly. Yeah. Haa. I understand. Yeah. (She went on and told 6
a funny story about one of her classmate who liked to use cell phone in class.)

Learners of English rarely used the strategy of a request for clarification in video-based SCMC, which was probably related to their adequate capability for the discourse level of comprehension and also related to the meaning orientated task which did not require them to work on particular words. All the three examples of request for clarification occurred when an unfamiliar point might affect the continuation of interaction. One example can be seen in excerpt 30 above. The interlocutor's concern at line 2 seemed to alert the learner to ask for clarification due to the presumption that the term was most likely to affect her understanding of the following message. As her expression at line 3 could be a request simply for repetition of the form (term) or for meaning clarification of an unfamiliar word, her interlocutor did not only repeat the term but also offered some explanation. It is noted that when learners often had difficulties in catching one particular word in video-based SCMC, they might not be able to consult a dictionary as they often did in text-based SCMC. One learner reported, "I could look up the dictionary for words I did not know in MSN interaction, but I could not expect my peer to type what she said when using Skype", which pointed out the difficulty of replacing the strategy

use with the use of a dictionary in such cases. From this aspect, this strategy might be promoted in video-based SCMC.

Learners of English did not use the three output-related strategies frequently in video-based SCMC either. They never requested help from their interlocutors directly, although they sometimes elicited help from their interlocutors indirectly by indicating their difficulties when delivering their messages. It is noted that not every attempt at indicating a language difficulty could successfully elicit help from the interlocutor, especially if the indicator did not clearly refer to a lexical problem. When one learner clearly indicated her problem in one particular term in her message, “They like to play computer games, they..urr..like..urr..urr..like urr umm farm..farmvili ↑ as you said.”, her interlocutor replied to her indirect request for help with the intended term, “Farmville. Yeah.” On the other hand, another learner has attempted to verbally mark her less perfect expression by “you know” when describing and exemplifying one essential point for her message; nevertheless, as she did not specifically indicate the need for a particular term, her interlocutor might assume the imperfect expression was normal in a language learner’s talk and only attempted to show her understanding verbally (a short response “yeah”) and nonverbally (nods) to encourage the learner to continue talking (e.g. LC’ short reactions in LE’s turn as shown in excerpt 9, p. 109). The interlocutor did not suggest a particular term for help until this learner indicated her inability to express her intended term and asked if her interlocutor could understand her expression.

As regards the use of comprehension check, the aforementioned example was indeed the only example in English video-based SCMC. The infrequent use of comprehension check might be related to the fact that their interlocutors have actively showed their current state of understanding and also the meaning orientated task. Both learners of English and their interlocutors often showed their

understanding in the primary speaker's turn space during synchronous video-based interaction. As shown in excerpt 32 below, both LE3 and LC3 gave reactions in each other's turn space. The reactions at lines 8-11 did not take over LE3's turn and thus they were still in the space of turn 1 rather than a new turn. Similarly, reactions at lines 18-19 were in the space of turn 2. As the interlocutors have frequently showed their understanding, the learners did not really need to make comprehension checks. Moreover, as it was a meaning orientated interaction that did not require the discussion of any particular target language terms, learners could avoid some unfamiliar terms or language use and consequently reduced the need to make comprehension checks.

Excerpt 32: Video-based SCMC in English

- <Turn 1> LE3: Yeah. And you just mentioned about the limitation of the Twitter. And I found 1
another interesting urr urr cultural difference[.] Or the language difference 2
between English and Chinese. We do have the same limitation, but since you know 3
that urr the kind of character, urr if we say the one hundred character[,] maybe 4
in English, it's just one sentence[.] But in Chinese, it could be three or four 5
sentences [in one hundred character.] So I didn't feel about the limitation. The 6
limitation is not exist. 7
- LC3: [Uh huh.] 8
[Um.] 9
[Um.] 10
[Yeah::.]] 11
- <Turn 2> LC3: Oh, it does for English people. Yeah, that something that is is useful about Chinese. 12
But it's really irritation for me as well, because you know like when you send the 13
text message↑((mine))[.] like umm... Yeah, on my Chinese phone, like the 14
word 咖啡(*coffee*), it's two characters, but it's six letters in English[.] So 15
it's really like r:: it's not fair. English words could be really long, but urr it's it's 16
easier to send message in Chinese on the mobile phone. So...hh. 17

LE3:	[Um.]	18
	[Yeah.]	19

The short reactions in the primary speaker's turn space often indicate the listeners' current state of understanding, attention, and interests that might not only reduce the need of comprehension check, but also encourage the continuation of the proceeding talk. Indeed, this usage is considered as one type of input elicitation strategy and will be presented below. The frequent use of short responses in the current speaker's turn, which is also known as back-channel communication, seemed to promote a close interaction in English video-based SCMC as such type of reactions (e.g. lines 8-11 and 18-19 in excerpt 32) allowed listeners to actively participant in their interlocutors' talk.

Input Elicitation Strategies: This is the most frequently used CS in English video-based SCMC among all six types of CSs. The strategy includes both explicit encouragements of the continuous talk and continuation signals by showing the listener's current state of understanding. Learners of English gave a great number of continuation signals in video-based SCMC, but never explicitly asked their interlocutors to continue talking. As their interlocutors never attempted to abandon their messages, the learners did not seem to have a proper timing to explicitly request the continuous talk. Besides, learners might simply feel uncomfortable to explicitly encourage their interlocutors who are native speakers of the target language to continue talking. After all, learners are often the subjects being encouraged to talk more in a learning setting.

Learners of English frequently gave short reactions, including but not limited to utterances such as "uh huh" and "yeah", exclamations such as "really?!", and repetitions of their interlocutor's term, in the primary speaker's turn space. Schegloff

(1981 & 2000) viewed such types of reactions as “continuers”. He proposed that discourse is actually an interactional achievement and the effect of continuers should not be overlooked, although the sight of contingent alternative of continuers may be lost once the primary speakers carry on talking. Indeed, his idea might be supported by the findings that such reactions were often frequent concurrent with longer sections of talk (e.g. excerpt 32, p. 182) and also the primary speaker sometimes replied to the continuation signals before carrying on the talk (one example can be seen at lines 5 and 6 in excerpt 5, p. 82: the primary speaker reacted to the listener’s uptaking by a simple reaction, ”yeah”, and then carried on expressing her intended message).

In addition to a heavy use of continuation signals in the primary speaker's turn space, learners of English also used similar expressions such as "really?" or "Is it?" to pass a turn sometimes. One example is shown in excerpt 33 below. After a clear pause in the conversation, the learner passed a continuation signal in turn 4 and subsequently his interlocutor added some personal experience in reply. Such usage was also viewed as the use of input elicitation strategies in this study as their underlying intention was let their interlocutors talk more.

Excerpt 33: Video-based SCMC in English

<2 turns are omitted>

<Turn 3> LC2: Umm it's kind of popular here too. Urr lots of teams. Urr and ice hockey actually↑ I

in the UK[.] Umm that's very popular too. 2

LE2: [Uh huh.] 3

<Turn 4> LE2: Oh, is it? 4

<Turn 5> LC2: Yeah. Ice hockey. Urr I love I love watching ice hockey. It's brilliant hh. It is. I 5

wouldn't do it hh. 6

Inferential Strategies: This kind of strategy involves asking relevant questions to or giving comments on the proceeding conversation and its use usually requires a good comprehension as well as production ability (Rost & Ross, 1991). Almost all learners of English showed the capability of using this strategy in video-based SCMC. Unlike the use of input eliciting strategies that might sometimes involve feigning understanding, most examples of this strategy could overtly indicate learners' current state of understanding. Moreover, such questions or comments could also show a particular point in their interlocutors' message that attracted their attention or interest, which was particularly valued when the point was embedded in a relatively long and spontaneous message. As shown in excerpt 34 below, the interlocutor mentioned KTV in England to highlight her preference for an Asian style of KTV (turn 4). As spontaneous talk, the message jumped here and there when LC3 attempted to show the difference between KTV in Japan and in England. Nevertheless, as the learner showed her attention to or interest in the fact that people sing in public if they go to KTV in England by a concerned question (turn 5), LC3 specifically added more information about the way KTV in England happens (no entrance fee, but no private room either) in order to explain why people sing in front of many strangers there. As Farrell and Mallard (2006) pointed out, when the interlocutor gave further elaboration or more new information based on the learner's question, the conversation was indeed developed by both sides of interlocutors. That is one important distinction between input elicitation strategies and inferential strategies. Learners were less involved in conversation development when using input elicitation strategies.

Excerpt 34: Video-based SCMC in English

<Turn 1> LE3: (A closure of the previous topic is omitted.) And and another is umm "夜唱". Umm I	1
people go to the KTV and singing all the night.	2
<Turn 2> LC3: Yeah hh. I like doing this hh.	3
<Turn 3> LE3: Really?	4
<Turn 4> LC3: Yeah, but I can't do that in England. Because umm if:: KTV is quite different.	5
You know like in Asia, you have your own room[,] and you can go with your.	6
friends If you go...you can't...you just. Said like if you have KTV in England::, it's	7
like a pub and it's a big room. And it's like the whole bar, everyone sees you. Like	8
maybe a hundred people see you and all drinking beers. And I don't like it,	9
because it's quite embarrassing. But it's nice, cause when I went...when I was in	10
Japan↑, you can go for karaoke[,] and this this little ((gesture)) like,	11
so like maybe four or five of you. No many people, and it's like very close	12
and pausing for quiet↑. Umm so you're not very embarrassed, you know you're	13
with your friends., But in England if you go to KTV, it's just like too many	14
people and you only got to sing one or two songs, that's it. So in England,	15
it's not good hh.	16
LE3: [Uh.]	17
[Uh huh.]	18
<Turn 5> LE3: So one hundred people heard one person sing? Hundreds of people and heard one	19
person to...sign.	20
<Turn 6> LC3: Yeah, everyone gets like one turn. It's not like...cause you know↑ when when	21
you're in Asia, when you go to KTV, you have to pay::, see like your own like	22
room[.] Yeah? [But] if you go to KTV in the UK↑, it's like 酒吧, like in	23
the bars↑[.] It's where everyone... it's free to go[,] but umm everyone	24
watches you[.] It's not private, so it's really embarrassing. So I don't do it in	25
the UK. I think I did it in the UK once, but I was so embarrassed. So it's horrible.	26
Cause you don't know the people[.] You know like the initial friends. But if	27
you go with your friends, it's much better. So...	28
LE3: [Uh huh.] [Yes.]	29
[Oh.] [Uh, free.]	30
[Oh::.]	31

Verbal Strategy Markers: This strategy was used quite frequently by all learners of English in video-based SCMC. Due to a relatively short processing time in a video-based SCMC environment, learners of English often rephrased or added some information to their original expressions to ensure the comprehensibility of their expressions. Similarly, they also intentionally used some uncertain or less perfect expressions to help deliver their intended messages, although they knew these expressions might not be in an accurate target language form or not close enough to their intended message. The use of verbal markers was an overt reflection of their awareness of less perfect target language expressions and also their concern that whether if their expressions closed enough to their intended messages.

Almost 75% of verbal markers used by learners of English in video-based SCMC were to mark rephrasing work, while the others were used to indicate the less perfect expressions, including but not limited to using the strategies of circumlocution and approximation as well as switching to a first language term. They used “you know” much more frequently than “I mean” when marking the rephrasing work. The verbal marker “you know” seemed very effective to elicit attentive cooperation since almost all examples leaded a direct response from their interlocutors. Its use seemed to overtly invite their interlocutors to collaborate with them on reaching meaning agreement. Indeed, as in meaning orientated interaction, their interlocutors often showed their understanding in response or negotiated for meaning if the message was not comprehensible to them. They rarely corrected the language form when the message was comprehensible. Apart from the verbal markers to prepare for repairs, learners also tended to use the terms, “kind of” and “like”, to indicate the less perfect expressions. As learners have signalled their

interlocutors about the problematic point, some possible misunderstandings might be prevented.

Time Gaining Strategies: Learners naturally need more time to plan their messages in the target language than in their first language. Indeed, before planning their responses, learners might also need extra time to digest what they heard. One learner reported that “sometimes I might not catch on (to)¹⁸ what he said as soon as I heard it”. While studies (e.g. Chun, 1994; Kelm, 1992; Kern, 1995) found text-based SCMC could reduce time pressure due to its written nature, video-based SCMC that closely resembles traditional face to face communication did not seem to have such effect. From this aspect, it was not surprising that all learners of English used time gaining strategies in video-based SCMC.

Learners of English often filled pauses by repeating the whole or part of their interlocutor’s message or using fillers such as “um...”. Their attempts were probably connected to their awareness that a long pause could have a possible consequence for conversation breakdown. They often used this strategy when planning the answers to their interlocutors’ questions. In contrast, they tended to react spontaneously to other types of messages as they did not need to address one particular point posed by their interlocutors. In addition, when one learner attempted to repeat her interlocutor’s question to gain time, she mistakenly repeated her interlocutor’s question “When will you leave home?” as “When will I be home.” Her interlocutor then corrected the misheard part of the question by saying, “leave home”. Getting confirmation or correction of the question appeared to be an added bonus of repeating the question to gain time.

¹⁸ The parentheses are to mark word(s) or observations added by the researcher. This method is applied to similar situation from now on.

Feigning Understanding, Framing, and Omission: All these three strategies were used infrequently in English video-based SCMC and the strategy of omission was indeed used rarely in all four SCMC settings. It is noted there might be some successful attempts at feigning understanding left unnoticed in performance data. According to an after-task questionnaire, most learners of English (four out of six) reported their pretending understanding to avoid interrupting the flow of conversation despite the apparent differences in the frequency. Only one learner claimed he never did so. As regards the strategy of framing, learners of Chinese just used it consistently more than learners of English. As several open-ended questions based on a suggested topic were listed in a work sheet to help the interaction, most dyads tended to suggest moving on to the next question and thereby clearly frame a topic shift. Or they sometimes would use a simple “so” to introduce a new topic. Each tandem learning dyad in this study was formed by one learner of English and one learner of Chinese and their partnership remained the same across the four experimental interactions. Whereas discourse is an interactional achievement, a topic shift only needs to be framed by one side of interlocutor. Learners of Chinese were often the one in dyad to mark the topic shift. As this study only investigated the strategies used by learners, the number of this strategy use in English video-based SCMC appeared to be small.

In brief, except for the five most frequently used interactional strategies, the other interactional strategies were only used occasionally or even rarely in English video-based SCMC. While inferential strategies were used frequently in both text-based and video-based SCMC, the other four most frequently used interactional strategies in English video-based SCMC seemed to be affected by the conversation medium to some degree. As the most frequently used CS among all the others, a large proportion of input elicitation strategies use in English video-based SCMC

involved passing continuation signals in the primary speaker's turn space. Such usage was indeed not applicable in text-based SCMC. The frequent use of verbal strategy markers and time gaining strategies seemed connected to the relatively short processing time in video-based SCMC. Due to the time pressure, they often needed to repair their original messages or use less perfect expressions. The use of verbal markers could help them prevent some possible misunderstandings caused by these repair work or less perfect expressions. Similarly, they also needed to use time gaining strategies to prevent conversation breakdown during planning time. As regards confirmation check, learners did not only confirm their understanding but also their hearing in video-based SCMC due to reception problems or inadequate listening ability. Besides, learners did not have time to consult a dictionary for uncertain terms in their interlocutors' messages in video-based SCMC. These two factors might increase the use of confirmation check in video-based SCMC compared with text-based SCMC.

(2) Compensatory strategies

Compensatory strategies are the third most frequently used CSs by learners of English in video-based SCMC; nevertheless, apart from self-rephrasing, the other compensatory strategies were actually used infrequently.

Circumlocution, Approximation, Use of All-purpose Words, and Literal Translation: These four strategies are mainly to compensate for the problems of lexical deficit in the target language. The former two strategies were only used occasionally, and the latter two strategies were indeed never used by learners of English in video-based SCMC. The infrequent use of these four strategies might be

partially explained by the fact that some learners reported that they sometimes avoided using unfamiliar terms to ensure the comprehensibility of their expressions.

Self-rephrasing: The occurrences of self-rephrasing use accounts for almost 80% of all compensatory strategy use in English video-based SCMC (23 out of 29 occurrences of all compensatory strategies use). Learners of English often rephrased their own messages in video-based SCMC, which is probably related to a relatively short planning time and also the inability to edit their messages as they did in text-based SCMC. Self-rephrasing in this study includes paraphrasing, restructuring, or repeating learner's own utterance with adding new information. Learners of English not only paraphrased their sentences with awareness of a gap between their expressed sentences and intended messages, but also restructured the sentences which they failed to complete at the first attempt. It is noted that the attempt at restricting an uncompleted sentence did not include a false start. Learners might start a sentence like, "Because I think...Because it is...." since they were still planning their messages. The message following such a sentence initial could not be viewed as "rephrasing" as the original message needed to be rephrased was not existed. Indeed, such type of sentence initials could be found in any part of a turn, not just at the beginning of a new turn. Finally, learners of English also tended to add some information to the rephrasing work. For example, one learner of English explained she preferred Facebook to Myspace as she had more friends in Facebook and then she added she had only five friends in Myspace to her rephrased message. Similarly, another learner said she generally went to gym instead of university field due to the bad weather and then she added it rained a lot and thus kept her from doing exercise outdoors.

(3) Reduction strategies

Reduction strategies are the least frequently used CSs in English video-based SCMC. Only one learner of English used this type of CSs in video-based SCMC.

Message Abandonment and Message Replacement: This learner replaced her pre messages twice by different messages and she once laughed away her message abandonment when realizing she was incapable of completing it. Reduction strategies refer to tailoring the intended message to learners' language knowledge, which were recognized along with achievement strategies as a basic duality in CSs use by Færch and Kasper (1983b). Corder (1983) considered reduction strategies as attempts to avoid risks and useful to maintain the conversational flow. In his opinion, the use of reduction strategies does not equal failure. This learner reported her willingness to take risks in making mistakes and seldom gave up her intended messages. Indeed, she was very productive and also used various CSs to help her with message delivering in video-based SCMC. Although there was no direct proof that she used this strategy to avoid risks intentionally or it was simply a failure of manipulating her language knowledge, her use of reduction strategies did seem to help the conversation flow without getting stuck or causing conversation breakdown.

(4) Focus-on-form strategies

Focus-on-form strategies are to ensure the accuracy of the target language use. Despite being in meaning oriented interaction, learners of English showed their concern for the accuracy of their own expressions through the use of these three focus-on-form strategies. They used the strategy of self-correction particularly frequently compared with the other two strategies. The use of these three strategies will be described below.

Self-correction: The corrections learners of English made are mostly grammatical corrections, including but not limited to a subject and verb agreement, time tense, a singular/plural form of noun, and preposition. They sometimes made several attempts on one single correction. One learner struggled in having an accurate expression and uttered “we use a system of German, we use the Germany sys, German system of.. of law in Taiwan”. This series of corrections indeed reflects her mental processing of consulting several learned grammar rules (e.g. an indefinite article “a” or a definite article “the”).

Meta-talk: Learners of English did not use meta-talk particularly frequently in video-based SCMC. Meta-talk involves using language to reflect on language use and its use can indicate what has been aware of from one’s own or the interlocutor’s use of language (Swain, 1998). From this aspect, learners’ verbal responses to their interlocutors’ corrections, including a simple repetition, are considered as the use of meta-talk in this study, although their conscious awareness might not at the same level as when they explicitly discussed one particular language usage. Although most native speakers of English in this study tended to give implicit corrections while reacting to learners’ messages, learners of English could often notice these implicit corrections. Indeed, most examples of meta-talk in English video-based SCMC were repetitions to these correct forms or pronunciations they noticed in their interlocutors’ talk.

Own Accuracy Check: This strategy was used rarely in English video-based SCMC. Only two learners contributed three examples in total. They repeated one particular word/term with a rising intonation to check the accuracy of wording and a couple of slightly different pronunciations were uttered when the attempts were to check the accuracy of pronunciation.

(5) Sociocultural strategies

Sociocultural strategies were the second most frequently used CSs in English video-based SCMC. Social formula was indeed the most frequently used CS of all six types of CSs.

Social Formula: Similar to their own performance in text-based SCMC, learners of English also used social formula for greetings and leave-takings in video-based SCMC. Apart from greetings and leave takings, they mainly used social formula to apologize for various reasons. They often apologized for their incapability to understand or clearly hear their interlocutors' talk. As their interlocutors often repeated the messages with a slower speed or with some extra explanations, such an apology might be viewed as a polite request for repetition. In addition, they also apologized for their incidental talk during their interlocutor's turn. Overall, the use of social formula also reflected their intention to impress their interlocutors positively when these formulas were often in polite tone.

Code-switching: This strategy was not used particularly frequently in English video-based SCMC. Most examples of this strategy use were to present a corresponding culture to the first language. For example, one learner introduced two popular leisure activities for university students in Taiwan starting with the first language terms “夜衝 (a literally translation is night dash, but it actually refers to a favourite activity for some young people to ride motorcycles in a high speed with their friends at nights)” and “夜唱 (a literally translation is night sing, but it refers to singing in KTV at nights)”, followed by explanations in the target language. These appeared to be no equivalent terms in English and some background knowledge might be required to have the meaning come across. Therefore, the use of the original terms in Chinese with some explanations in English to introduce these two

activities is quite reasonable. Besides, its use might also have some social bonus as her tandem learning partner was probably happy to learn the Chinese language and culture. Another example of code switching was also to build social relationship and might be specific between tandem learning partners. One learner of English responded “沒問題 (no problem)” in Chinese to his interlocutor’s message “I think the next one (meeting) is in Chinese. Can I apologize in advance hh”. In addition, one example of code-switching in English video-based SCMC was actually triggered by her interlocutor’s use of a Chinese term along with its English equivalent. In this case, the learner used the mentioned Chinese term in her reply might help a close social relationship building.

(6) Paralinguistic strategies

There is only one paralinguistic strategy investigated in a video-based SCMC environment, which is mime.

Mime: Most learners of English did not show many body movements or gestures during interaction. Only one learner contributed all the four examples, although many of them mentioned their using gestures to overcome language difficulties as parts of their previous experience in response to an open-ended question in the background information questionnaire. The infrequent use of mime in video-based SCMC might be related to the medium restriction. One learner reported that her webcams could only catch her facial expression, but it was too close to catch her gestures. Therefore, she did not attempt to use mime as support for language expression. In addition, the examples of mime in English video-based SCMC seemed to indicate this learner’s aptitude for using gestures to make her talk vivid rather than to compensate for language problems since these gestures used

concurrently with clear verbal expressions and did not seem to function as verbal language aids.

Summary

As reported above, learners of English used a great number of CSs in video-based SCMC, but not all CSs were used equally in terms of frequency. Some CSs were used much more frequently than the others, while there were few strategies which were never used by learners of English in video-based SCMC. The following are some points summarized from the above report to prepare for comparisons of CSs use in the four SCMC settings.

- Learners of English tended to closely participate in video-based SCMC and used a number of CSs as they might be less distracted by the use of other resources.
- Input elicitation strategies were the most frequently used CS in English video-based SCMC among all six types of CSs and most examples involved passing continuation signals in the primary speaker's turn space to encourage the continuous talk.
- The frequent use of verbal strategy markers, self-rephrasing, and time-gaining strategies by learners of English in video-based SCMC seemed all related to the insufficient processing time. They used time gaining strategies to avoid a long pause for thinking as that might cause conversation breakdown. They tended to rephrase their messages that might result from the fact that they planned the message when delivering it. While they often rephrased their own messages or used less perfect expressions with awareness in video-based SCMC due to the short processing time, they often marked their rephrasing work or less perfect expressions to prevent possible misunderstanding.

- Learners of English in this study were capable of using inferential strategies to develop a discourse with their interlocutors. Indeed, they used this strategy frequently in both text-based and video-based SCMC.
- Learners of English used a great number of social formulas for greetings, leave takings, and making apologies. The frequent use of social formula might reflect their intention to impress their interlocutors positively.
- Learners of English often made grammatical corrections in video-based SCMC. The frequent use of self-correction might indicate their concern for using accurate language form in a meaning orientated interaction.
- The infrequent use of mime in English video-based SCMC might be related to the awareness of the medium restriction and also the individual's aptitude for talking with gestures.

5.2.4 CS Use by Learners of Chinese in Video-based SCMC

(1) Text-based SCMC in English	(3) Video-based SCMC in English
(2) Text-based SCMC in Chinese	(4) Video-based SCMC in Chinese

This is the last part of results to fill the frame of this four-way comparison, which was about what CSs were employed by learners of Chinese in video-based SCMC. Although all learners of Chinese reported consulting other resources in video-based SCMC, they also used various CSs to help their interaction. The phenomena seemed connected to their inadequate language abilities. One learner of Chinese expressed interacting in a text-based SCMC environment “felt less pressured and more like we could talk at a pace which we could both understand and benefit from”. On the other hand, she admitted she was more capable of using learned language in video-based SCMC. She explained, “Because it forces you to practically use the language, but without the time to check a dictionary so you get to

learn in a more immersive way.” Nevertheless, when she was forced to devote herself to the interaction by being in a video-based SCMC and used various CSs to achieve mutual comprehension with her interlocutor, her inadequate language ability appeared to draw her away from the interaction occasionally. She indeed consulted a dictionary sometimes as she was unable to achieve mutual comprehension through negotiation. Interestingly, the use of a dictionary would not only be admitted by the learner in her after-task questionnaire but also identified in the interaction data. She tended to explicitly ask her interlocutor to wait for her consulting a dictionary as she might afraid an extended pause caused conversation breakdown. Apart from this example, the types of CSs used by learners of Chinese might also indicate their insufficient language knowledge. They often used CSs to improve their comprehension of input by asking for clarifications of unfamiliar words and also to compensate for the lexical deficiencies. The distribution of six types of CSs used by learners of Chinese in video-based SCMC is presented in table 11 below. In addition, the following report of individual CSs use will further illustrate how their inadequate language ability might affect the use of CSs. For example, they often embedded first language terms in the use of CSs.

Table 11 The distribution of CS use in Chinese video-based SCMC

CSs Categories (N=6)	Sum	Proportion (%)	Rank
Interactional Strategies	144	38.71	1
Compensatory Strategies	44	11.83	4
Reduction Strategies	3	0.81	6
Focus-on-form Strategies	75	20.16	3
Sociocultural Strategies	76	20.43	2
Paralinguistic Strategies	30	8.06	5

(1) Interactional strategies

Interactional strategies were the most frequently used CSs in Chinese video-based SCMC. Indeed, learners of Chinese used half of the twelve interactional strategies quite frequently in video-based SCMC. A detailed report of all these twelve interactional strategies use is provided below.

Request for Clarification, Confirmation Check, Comprehension Check, Direct Request for help, and Indirect Request for Help: Learners of Chinese used the former two strategies quite frequently to improve or ensure their input comprehension. They often made confirmation checks to ensure the correctness of their understanding and hearing. Instead of confirming the meaning of a sentence, they often paid attention to one particular term in their interlocutors' messages. One learner, who used this strategy particularly frequently, tended to repeat a heard term with a rising intonation to confirm her hearing. She frequently made a confirmation check that might just reflect her struggle in catching on to her interlocutor's speech. She reflected, "In Chinese interactions my speaking and listening skills are not to a very high level so I struggled a little." Except for few examples that she showed her recognition of the term right after her interlocutor repeating it in response to her confirmation check, most examples seemed to indicate her unfamiliarity with these repeated terms apart from checking the accuracy of hearing. Nevertheless, as her peer generally offered some explanation along with confirmation, she did not really need to make a request for clarifications afterwards. In addition, some learners of Chinese tended to use a first language term to confirm their understanding in the target language. For example, one learner attempted to confirm her understanding of the term "星座" by asking, "星座, 那個 zodiac, 對吧? (star signs, that (is) zodiac, right?)" That seemed to be an economic usage in a tandem learning interaction when

their interlocutors knew their first language as the target language, since the act could probably save some time and effort to confirm their understanding in the target language and might also benefit for building a positive intercultural relationship. Apart from the use of a first language term, one learner also used the strategy of mime when checking her understanding of the term “打掃 (to sweep and clean up)”. She repeated the term in the target language and in her first language respectively with a rising intonation also mimed at the same time. She asked “打掃? Cleaning?” with mime. Indeed, she was not the only one used mime to make confirmation check. Another learner attempted to point down when repeating the word “南 (south)” with a rising intonation to confirm her understanding of this word. Regardless of different expressions, most examples of confirmation check seemed to indicate their attention was frequently allocated at a lexical level.

Learners of Chinese also used the strategy of request for clarification quite frequently in video-based SCMC. Nevertheless, they tended to make a confirmation check first when they heard an unfamiliar term. As they often received some explanation along with a repetition, they did not often need to ask for clarification afterwards, which might explain why they did not use the strategy of request for clarification as frequently as a confirmation check. According to Rost and Ross (1991), learners with lower language proficiency tend to ask at a global level of clarification frequently as they are unable to indicate their problems precisely and then they may be able to ask more and more local level (key word) of clarifications with the progress of language proficiency. Learners of Chinese showed their capability to ask a local level of clarification in most cases. They often clearly indicated the unfamiliar term by repeating the term and then asked “是什麼? (is what?)” or “是什麼意思 (means what?)”. There is only one exception that several

attempts were made to indicate the unfamiliar term when the learner was unable to repeat it (as shown in excerpt 12, p. 113-114). Only a couple of learners occasionally expressed they were unable to understand the message without pointing out their problems precisely. One learner just said “Nooo 我不懂你在說什麼哈哈. (I don’t understand what you are talking haha.)”, when another learner tended to be more polite and said “呃對不起, 我的::我的聽力不太::不太好. (urr sorry, my:: my listening is not very:: not very good.)”. Although they did not explicitly request for clarification, the act of indicating incomprehensible messages itself might be considered as an indirect way to request clarification. Such examples could be considered requesting a global level of clarification. Indeed, their interlocutors often made input modifications to improve the comprehensibility in response to such expressions, unless learners explicitly showed no desire for clarification. One learner once apologized for her inability to understand her peer’s question and then just shifted the topic away by asking an irrelevant question. This is a very rare case since most learners would just feign understanding if they did not intend to request clarification or would probably request clarification to avoid being impolite when they could not feign understanding due to the form of the message.

The latter three strategies are to improve or ensure the comprehensibility of output. Learners of Chinese only used indirect requests for help frequently in video-based SCMC among these three strategies. Interestingly, they seemed to make more efforts when requesting help indirectly compared with requesting help directly. They tended to manipulate their available knowledge to give their interlocutors clues in Chinese in order to elicit help for their intended term, but they often simply asked “(an English term), 用中文怎麼說? (how to say in Chinese?)” to request help

directly. Perhaps they just wanted to force themselves to practice Chinese and reduce the use of English in their Chinese speech.

Input Elicitation Strategies: This strategy was used by every learner of Chinese in video-based SCMC. It is indeed the second most frequently used CS among all the six types of CSs in Chinese video-based SCMC. Most examples involved showing one's own understanding by utterances such as "uh huh" or repetitions of key terms as continuation signals. As some learners of Chinese have showed their difficulties in listening comprehension, their interlocutors tended to be alert to their reactions to ensure the input has been comprehended. Indeed, the interlocutors often offered a little more explanations or explicitly made a comprehension check when they assumed one particular term might cause learners difficulty. As shown in excerpt 35 below, LE1 attempted to check the understanding of the festivals she just mentioned one by one after the learner of Chinese requested clarification of Mid-Autumn Festival. As the learner has studied abroad in Taiwan for almost a year, LE1 tried to connect the living experience with these festivals for the learner. She paid attention closely to the learner's reaction and explicitly checked the comprehension in turn 12 when she noticed the uncertainty shown by the learner in turn 11. She also presumed the learner might not know the activity of "掃墓 (sweeping tombs of one's ancestors or relatives)", so she specifically made a comprehension check on it before carrying on the talk. Similarly, as the learner LC2 has apologized for the inadequate Chinese listening ability in advance, her interlocutor tried to slow his speech and also paused for her showing the understanding. The interlocutor even tried to break a sentence to ensure the comprehensibility as shown in excerpt 36. He meant to say that Taiwanese often have a family dinner, which is called "年夜飯", on Lunar New Year Eve that is 29th

December in the lunar calendar. He attempted to reveal the information in pieces and check every key term before moving on to the next. From this aspect, the use of continuation signals seemed salient in Chinese video-based SCMC in terms of the function and effect. It is noted as these two learners continued to show their difficulties in listening comprehension, the two dyads indeed modified their interactions. The interlocutors attempted to pose more questions for the learners to talk more instead of talking more themselves. It seemed easier to help learners' expression than comprehension as learners could easily consult the dictionary for their intended words, but they might just have no clue of what they heard in their interlocutors' speech. Indeed, the aforementioned examples did not only indicate the effect of input elicitation strategies but also the need for the occasional use of feigning understanding. Frequently indicating the comprehension problems might discourage the continuous talk. Finally, encouraging the learner to talk instead of giving more input might explain the number of input elicitation strategies used by learners was not as large as learners of English in video-based SCMC, although the effect of this strategy seemed more salient in Chinese video-based SCMC than in English video-based SCMC.

Excerpt 35: Video-based SCMC in Chinese

<7 Turns are omitted>

<Turn 8> LE1: 中秋節. 中秋節就是...吃月餅的那個. [诶, 是吧!? 對.] 吃月餅然後還有烤肉的那個.

Mid-Autumn Festival. Mid-Autumn Festival is...the one people eat moon cakes. Eh, yes!? Yeah. That one is eating moon cakes and also BBQ.

LC1: [喔~吃月餅那個, 呵呵呵]

Oh~ the one eat moon cakes, he he he¹⁹

¹⁹ It refers to one type of laughter.

<Turn 9> LC1: 喔, 好, 我懂.

Oh, ok, I understand.

<Turn 10> LE1: 呵呵. 你知道吧! 還有端午節, 就是吃粽子.

He he. You know it! And Dragon Boat Festival is eating rice dumpling.

<Turn 11> LC1: 摠..(facial expression and intonation indicate the uncertainty)

Uh..

<Turn 12> LE1: 你知道粽子嗎?

Do you know rice dumpling?

<Turn 13> LC1: 粽子. [摠摠摠.]

Rice dumpling. Uh uh uh

LE1: [你有吃過粽子嗎?]

Have you ever tried rice dumpling?

<Turn 14> LE1: 就是我上次跟你講的那個.

It's the one I have told you last time.

<Turn 15> LC1: 那個..裡面有飯跟肉跟[...] 這樣. 摠.

That one.. stuffs with rice and meat and...So. Uh.

LE1: [對對對對.]

Yeah, yeah, yeah, yeah.

<Turn 16> LE1: 對對對對. 那個是那個是端午節. 然後還有那個...清明節. 清明節就是去拜..拜祖先的那個. 掃墓. 你知道嗎?

Yeah, yeah, yeah, yeah, that one that one is Dragon Boat Festival. And then that one... tomb-sweeping day. Tomb-sweeping day is the one that people worship.. worship their ancestors. Sweeping tombs. Do you know?

Excerpt 36: Video-based SCMC in Chinese

<Turn 1> LE2: 嗯其實台灣的新年基本上都跟中國差不多[...] 就是我們會在農曆(.)²⁰ 就是陰曆, lunar calendar.

Um indeed (the way) Taiwanese (celebrate) New Year is basically about the same as in China. That is we, in farmers' calendar, will. That is lunar calendar, lunar calendar.

LC2:

[Uh huh.]

²⁰ “(.)” indicates a brief but recognizable pause, when ” : “ shown in turn 3 indicates prolongation of a sound. Please refer to table 4 in chapter 3 (p. 74) for a list of transcript symbols.

<Turn 2> LC2: Uh huh. Oh, 農曆.

Farmers' calendar.

<Turn 3> LE2: 對. 農曆或者是舊曆. 舊曆的...12月29號, 會吃年夜飯(.) 年:夜:飯:.

Yeah, farmers' calendar or the old calendar. December 29th...in the old calendar, will eat New Year Eve dinner.

<Turn 4> LC2: Oh, yes. 夜飯. Oh oh oh.

Eve dinner.

Framing: Learners of Chinese used this strategy consistently more than learners of English and seemed more dominant in dyadic interaction, regardless of which mode of SCMC they were in. In addition, as they tended to go through more topics in video-based SCMC than in text-based SCMC within 30 minutes of time, it seemed reasonable they used this strategy to mark topic shifts more frequently in video-based SCMC. One learner of Chinese who used this strategy particularly frequently reflected her attempt to ensure they went through all the suggested questions presented in the work sheet and finish within the time limitation. She often marked the closure of the old topic by “好的 (ok)” and then asked “我們還有什麼問題? (What questions do we still have?)” or just went on to ask the question. Interestingly, her peer specifically showed her appreciation in this regard as she admitted that she often failed to stick to the suggested topic herself. It is noted that clearly marking the closure of the old topic might sometimes result from the user's awareness of not being able to continue the proceeding topic. One learner expressed he agreed with what his interlocutor said and then suggested moving on the next question. According to his stimulated reflection, he did not really understand his interlocutor's message and thus he suggested moving on to the next question to avoid a further discussion about the proceeding message. It is worth noting that the two most productive dyads did not use this strategy. Instead of clearly indicating

which suggested questions they were going to talk, they just talked and moved from one topic to another spontaneously.

Verbal Strategy Markers: Learners of Chinese used verbal strategy markers quite frequently in video-based SCMC. They often used “不知道怎麼 (Don’t know how to say)” or similar verbal marks to indicate a strategy use or less accurate target language use to prevent possible misunderstanding and also elicit attentive cooperation. It is noted they did not often verbally mark their attempts at self-rephrasing. Indeed, only one learner ever used “我的意思是...(what I mean is...)” to mark his rephrased work.

Feigning Understanding, Inferential Strategies, Omission, and Time-gaining Strategies: In addition to the strategies of comprehension check and direct request for help, learners of Chinese also did not use these four strategies frequently in video-based SCMC. Although all learners of Chinese admitted they feigned understanding sometimes, they tended to ensure the understanding of particular terms by frequently using the strategies of confirmation check and request for clarification. They even occasionally requested a global level of clarification. Based on their reflection, the use of feigning understanding seemed to occur when they just had no clue about the whole message. Sometimes feigning understanding and then shifting the topic away might be a good strategy to manage the discourse.

As they often allocated their attention to some particular terms, they might not be capable of using inferential strategies as its use required a good understanding of the preceding message. They also used the strategy of omission rarely. Indeed, they never really carried on their talk after skipping one word for long.

They did not frequently use fillers or repeat their interlocutor’s talk to gain time either, but they tended to talk slowly and often had redundancy in their Chinese

speech. Only one example of repeating the interlocutor's question to gain time was found, when the other three examples were indeed explicitly asking their interlocutors to wait for their consulting a dictionary or reading the worksheet. One learner knew the question his interlocutor just asked was shown on the worksheet, although he did not really get the question. Instead of asking for repetition, he just asked his interlocutor wait a second and read the question silently himself.

(2) Compensatory strategies

Learners of Chinese used all types of compensatory strategies in video-based SCMC, but they only used the strategy of self-rephrasing frequently. A report of each compensatory strategy use is provided below.

Circumlocution, Approximation, Use of All-purpose Words, and Literal Translation: Learners of Chinese used the former three strategies sometimes and the last one very rarely. They attempted at exemplifying, illustrating, or describing the features of the target object or action (i.e. the use of circumlocution), or using one single substitute term with which the target term shares semantic features (i.e. the use of approximation) sometimes to compensate for vocabulary shortage. They also used all-purpose terms such as “東西 (things/stuff)” for the same purpose.

Learners of Chinese rarely used literal translation to compensate for lexical deficiencies. It is noted that its use might sometimes be overlooked since it was natural to use translated terms when introducing learners' native cultures in the target language. One British learner tried to introduce the most popular festival in UK and said “*嗯最.. 最流行的是... 呃... 呃是煎餅... 煎餅日. 呃節日. 嗯.. 呃.. 是煎餅節 (umm the most.. the most popular is.. ur.. ur is pancake... pancake day. Ur festival.. um.. ur.. is pancake festival).*” This example was difficult to code the use of

literal translation without this interlocutor's reflection since her final expression “煎餅節” has indeed been used commonly.

Self-rephrasing: They used self-rephrasing much more frequently than the other compensatory strategies in video-based SCMC. As discussed in English video-based SCMC, the frequent use of this strategy in video-based SCMC might because learners did not have enough planning time and worried their expressions were not close enough to their intended messages. It is noted that when the use of self-rephrasing in this study embraces the usage of repeating one's own utterance with something added, it seems reasonable to include repeating one's own utterance with code-switching. Indeed, one learner of Chinese did so several times in video-based SCMC. She once asked and rephrased her question, “有什麼區別? 有什麼 differences? (What are the differences? What are the differences?)” While this example also reflected the learner's uncertainty of the first attempt and also her intention to ensure the comprehensibility, it was indeed not particularly different from the other examples of self-rephrasing.

(3) Reduction strategies

As the least frequently used CS in Chinese video-based SCMC, reduction strategies were only used three times in total by learners of Chinese.

Message Abandonment and Message Replacement: One learner tried to replace her message when being unable to complete it; while two other learners tried to abandon their messages by explicitly expressing they were unable to complete them. It is interesting that one of them did not eventually abandon her message since her interlocutor kept encouraging her to try after she has expressed her intention to give up her message. This example seemed to indicate learners might not be at the

limits of their resources when using reduction strategies and also show the importance of interlocutors' support.

(4) Focus-on-form strategies

Learners of Chinese used focus-on-form strategies quite frequently in video-based SCMC, particularly the use of meta-talk. Despite a great number of occurrences, most examples of meta-talk in Chinese video-based SCMC did not seem to involve a high level of cognitive processes.

Self-correction: Learners of Chinese used self-correction less frequently than the other two focus-on-form strategies. Most examples were to correct their own pronunciation, including tonal corrections. Indeed, tonal corrections appeared to be a special feature in Chinese video-based SCMC. Learners of Chinese in this study, who are native speakers of English, were not very sophisticated to use the four tones; nevertheless, they would try to make corrections if they noticed this kind of mistakes. There were only few examples of correcting other types of mistakes such as the misuse of a form. For example, one learner tried to correct her misuse of a noun phrase 節慶 (festival) when a verb phrase 慶祝 (celebrate) was needed.

Meta-talk: Meta-talk involves learners' reflections on the target language use in conversation. That is, its use can reflect what has been noticed by learners in either their own or their interlocutors' talk. Most examples of meta-talk in Chinese video-based SCMC involved a repetition of their interlocutors' feedback, including implicit and explicit corrections as well as suggestions to help learners' expressions. A conscious noticing could allow learners to acquire target-like form (Schmidt & Frota in Swain & Lapkin, 1995). Although a repetition of one corrected or suggested term from their interlocutor might not involve a higher level of cognitive processing

as a discussion on language usage, the noticing is indeed an important step towards the acquisition.

Own Accuracy Check: Learners of Chinese frequently checked the accuracy of wording as well as pronunciation in video-based SCMC. For example, one learner attempted to check the accuracy of one particular term in his expression by saying, “...就是請噠親戚↑ Like relatives, 親戚. 親戚來吃飯. (...that is inviting um relatives↑. Like relatives, relatives. Relatives come for dinner.)” Another learner checked the accuracy of her pronunciation by asking, “是 jiē tǐng²¹嗎? Festivals, jiē tǐng. (Is that jiē tǐng? Festivals, jiē tǐng)”. It is noted that learners of Chinese often used a first language term to ensure the correctness of their own expressions like in these two examples. The use of a first language term in the former case in Chinese video-based SCMC might also indicate the learners’ intention to ensure the comprehensibility of their output apart from checking the accuracy of wording. Indeed, whereas the content of meaning negotiation is often the language form (Swain, 1995), checking the accuracy of an expressed term might also check whether the meaning of this expressed term was close enough to the learner’s intended term.

(5) Sociocultural strategies

Both sociocultural strategies were used frequently in Chinese video-based SCMC. Indeed, code-switching was the most frequently used CS of all six types of CSs in Chinese video-based SCMC, although some examples might not indicate a strong social purpose.

²¹ She meant to say 節慶 (jié qìng; festival), but she mispronounced the term. Her pronounced term is presented by pinyin (a phonetic system) instead of Chinese characters as the sound can refer to many homonymic words. More importantly, the repetitions of this term with a rising intonation were to check the accuracy of the pronunciation and presenting in pinyin here should be more meaningful than randomly picked homonymic words. The same method will be applied to a similar situation from now on.

Social Formula: This strategy was indeed used frequently by both learners of English and learners of Chinese in text-based and video-based SCMC. Some learners of Chinese tended to use more than one formula for greetings and leave takings. One learner greeted his interlocutor with “你好 (How are you)” and then responded to his interlocutor’s greeting by another formula, “早安 (Good morning)”. Similarly, another learner of Chinese took leave by saying “好了. 現在該走了. 一會見. (Ok. Time to go. See you later.)” and said “再見 (good bye)” again in the following turn. While the use of social formula for greetings and leave takings were used by almost all participants in the four SCMC settings and regularly found in the beginning or at the end of each interaction, the use of formula for other types of social purposes tended to be more situational and was not repeated regularly. In addition, the use of formula for social purposes other than greetings and leave takings probably occurred more frequently in a longer conversation. Apart from greetings and leave takings, learners of Chinese often used formula to apologize for their inadequate language abilities or mistakes and also appreciate for their interlocutors’ help. When one learner requested clarification, she politely added her apology to the request. She asked, “接頭是什麼意思? 不好意思, 我不知道. (What does connector mean? Excuse me, I do not know.)” Although learners might not very familiar with Chinese oral culture, they could still show the politeness with the help of polite formula.

Code-switching: Learners of Chinese often switched code to English when introducing their native culture or custom such as “Easter” or “Santa”. It is sometimes difficult to infer the intention of these examples was to purposely present their original expressions or to compensate for the lack of vocabulary in the target language through the investigation into the interaction data. In contrast, some examples of code-switching were more obvious to compensate for learner’s language

difficulty when the switched term was not closely connected to one particular culture. One learner verbally marked a first language term and then gave some explanation of the term, “就是像那個 contract, 你每一個月付一點點的錢, 然後.... (just like contract, you pay small amount of money every month, and then...)”. Another learner also attempted to switch back to the target language right after the use of a first language term and also added some explanation of it, “每年噠在噠十一月噠五號, 噠我們有噠 bonfire, 很多樹, 樹放在一起 and then ‘fāng’火? 放(fàng)火. (Every year um November um fifth, um we have um bonfire, many trees, tress were put together and then ‘fāng’ fire? set on fire.)” The use of a first language term in these two examples was most likely to compensate for the lack of vocabulary according to the context. Similarly, one learner often repeated a target language term in her first language to ensure her target language expression matched with her intended message²². Her code-switching in “... 那個在報::報紙, 那個在 newspaper... (....that is in news::newspaper, that is in newspaper...)” probably reflected she was unsure about the term of newspaper in Chinese rather than for social purposes. Most examples of code-switching in this study were using a first language term in the target language speech. Nevertheless, there were few examples that learners repeated the whole sentence in the first language due to a concern for sentence structure. One learner expressed, “有一個人叫 Valentine, 他被::獅子 ((with mine)), 那個獅子吃他. He was eaten by a lion. (There is one person named Valentine, he was ((mime - eaten)) by a lion, that lion ate him.)” She rephrased her message and then repeated it again in English which seemed related to her uncertainty of using a passive form. There were more examples of using first

²² The following examples she made are indeed coded as self-rephrasing in this study due to the intention to ensure output comprehensibility by rephrasing her expression (refers to p. 208). It is noted that this study attempts to avoid double coding by excluding some examples of using first language to facilitate use of other CSs such as direct request for help, but some examples of code-switching for vocabulary deficiencies could not be excluded as their use did not mix with any other CSs.

language which were likely to compensate for the language difficulty in Chinese video-based SCMC compared with the other three types of interactions. That might indicate more language difficulties in self-expressing learners of Chinese encountered in video-based SCMC compared with learners of English who were at higher language proficiency and also with their own performance in text-based SCMC.

(6) Paralinguistic strategies

The only paralinguistic strategy coded in video-based SCMC is mime. Learners of Chinese indeed used a number of this strategy in video-based SCMC.

Mime: Most learners of Chinese used all kinds of gestures and body movements frequently and effectively to help their verbal expressions. One learner mentioned some people throw candy from cars for kids to eat when celebrating St. Patrick's Day in Ireland. Without the use of mime, his expression might cause confusion since he did not manage to say “丢 (throw)”, but came out a word sounded like “脱 (take off)”. Another learner tried to point at her own palm since she did not know how to say palm reading in Chinese when talking about her experience of palm reading in China. It is interesting that she kept pointing at her palm with a verbal expression “那个 (that one)” in the following turns when she wanted to say palm reading, although she has repeated “看手相 (palm reading)” perfectly right after her interlocutor told her the Chinese expression. This example indicated that mime might be an effective communication strategy, but it might sometimes deprive them of language practice. In addition, this example also supported that learner's repeating noticed input might not always result in “intake”, although noticing input is the first step toward “intake” (Ellis, 1994; Gass, 1988).

Summary

The use of CSs by learners of Chinese in video-based SCMC presented above is the last part of results to complete the frame of the four-way comparison. Some points are summarized below to prepare for the comparisons in the following chapter.

- Learners of Chinese tended to allocate their attention at a key word level rather than a discourse level in video-based SCMC. Accordingly, they used a number of confirmation check and request for clarification strategies to ensure their understanding of some particular terms.
- Learners of Chinese used indirect request for help more frequently than direct request for help in video-based SCMC. As direct requests for help often involved using a first language term to indicate the language problem, the frequent use of indirect requests for help instead might reflect learners' intention to practice the target language as much as they could.
- Input elicitation strategies were the second most frequently used CS among all investigated CSs in Chinese video-based SCMC and most examples involved showing one's own understanding as continuation signals. Its effect on input elicitation seemed more significant in Chinese video-based SCMC as the interlocutors were alert to learners' reactions.
- Learners of Chinese often used verbal markers to indicate CS use or less perfect expression in Chinese, but they did not often mark their rephrasing work.
- Learners of Chinese tended to use the strategy of framing consistently more than learners of English, which might indicate they were more dominant in dyadic interaction.
- Learners of Chinese tended to correct their own pronunciation, particularly the use of tone, in video-based SCMC.

- Most examples of meta-talk in Chinese video-based SCMC involved repeating the terms which learners noticed. Although such examples might not involve a higher level of cognitive processes as a discussion on language usage, the noticing was indeed an important step towards the acquisition of these terms.
- Learners of Chinese frequently checked the accuracy of wording and pronunciation in video-based SCMC. When they checked the accuracy of a performed term by repeating it in the first language, they were probably checking the meaning and the form at the same time.
- When learners of Chinese used social formula for greetings and leave takings similarly in the two modes of SCMC, the occurrences of formula for other social purposes such as apology and appreciation might naturally increase with a longer interaction in video-based SCMC.
- Learners of Chinese used the strategy of code-switching for social purposes and also for solving the problem of vocabulary deficiencies. Indeed, they also used first language terms largely to facilitate the use of other CSs due to their inadequate language ability, although such examples were not coded as code-switching in this study.
- Learners of Chinese used mime frequently and effectively to help their verbal expressions in video-based SCMC.

5.3 Summary

This chapter has elaborated how individual CSs were used in the four SCMC settings. As shown in table 12 below, learners of English and learners of Chinese used CSs similarly in text-based SCMC in terms of the distribution patterns of six types of CSs, while they tended to use CSs differently in the two modes of SCMC compared with their own performance. As there seemed to be a positive correlation

between the overall production and the frequency of CS use, it appeared to be problematic to make comparisons of CS use in the two modes of SCMC in terms of the frequency alone when learners tended to be much more productive in video-based SCMC than in text-based SCMC. Therefore, the following chapter will make comparisons in terms of the proportions of different types of CSs and then move the focus closer to compare individual CSs in terms of mean per turn as well as usages and possible effects. In addition, a multi-factor ANOVA was applied to show whether individual CSs were used significantly differently in the four SCMC settings.

Table 12 The distribution patterns of CS use and three most frequently used CSs in the four SCMC settings

SCMC Settings	The Distribution Patterns of CSs Use	Three Most Frequently Used CSs
(1) Text-based SCMC in English (N = 7)		1. Social Formula (SS) 2. Code-switching (SS) 3. Inferential Strategies (IS)
(2) Text-based SCMC in Chinese (N = 7)		1. Social Formula (SS) 2. Code-switching (SS) 3. Inferential Strategies (IS)
(3) Video-based SCMC in English (N = 6)		1. Input Elicitation Strategies (IS) 2. Social Formula (SS) 3. Verbal Strategies Markers (IS)
(4) Video-based SCMC in Chinese (N = 6)		1. Code-switching (SS) 2. Input Elicitation Strategies (IS) 3. Meta-talk (FS)
■ Interactional Strategies (IS) ■ Compensatory Strategies (CS) ■ Reduction Strategies (RS) ■ Focus-on-form Strategies (FS) ■ Sociocultural Strategies (SS) ■ Paralinguistic Strategies (PS)		

Three the most frequently used CSs excluding the use of paralinguistic strategies in each SCMC setting were also listed in the table 12 above, but many

points need to be noted. For example, although the number of examples of code-switching in Chinese video-based SCMC was larger than in the other three SCMC settings, learners of Chinese appeared to use this strategy to compensate for vocabulary deficiencies more frequently than learners of English. The examples of code-switching made by learners of English were mostly for social purposes. The qualitative differences in these frequently used CSs will be highlighted when making a four-way comparison. In addition, as this study intends to understand a wide range of CSs were used and might interactively affect the interaction in the four types of SCMC, some important points of how individual CSs were used in the four SCMC settings have been summarized in the end of each sub-section. These points will be further analysed when making a four-way comparison in the following chapter.

CHAPTER SIX: COMPARISONS OF THE USE OF COMMUNICATION STRATEGIES IN THE FOUR SCMC SETTINGS

6.1 Introduction

This chapter aims to present the comparative results of CS use in the four SCMC settings along with discussions of the findings in the comparisons. The organization of this chapter will start with comparisons of CS use in the two modes of SCMC and then comparisons between learners of English and learners of Chinese. It is noted that when making comparisons of CS use in the two modes of SCMC and in the two target languages, a possible interactional effect of media and languages on CSs use will also be addressed since each type of interaction investigated in this study is in fact under either level (text-based / video-based and English / Chinese) of two conditions (communication media and conversational languages).

6.2 Comparisons between Text-based and Video-based SCMC on Learners' Use of Communication Strategies

This section is to compare the use of CSs in text-based and video-based SCMC and thereby answer the second research question posed in this study. Each participant in this study undertook both text-based and video-based interactions in their target language that provides sufficient data to compare the use of CSs by learners in the two modes of SCMC. The comparison will start with looking at the proportions of different types of CSs used in the two modes of SCMC and then the focus will move to a closer examination of the use of individual CSs. The last part of this section will discuss the findings in contrast with the previous studies in the use of communication strategies (CSs) and computer mediated communication (CMC) in the field of second language acquisition (SLA).

6.2.1 The Distribution Patterns of CS Use in Text-based and Video-based SCMC

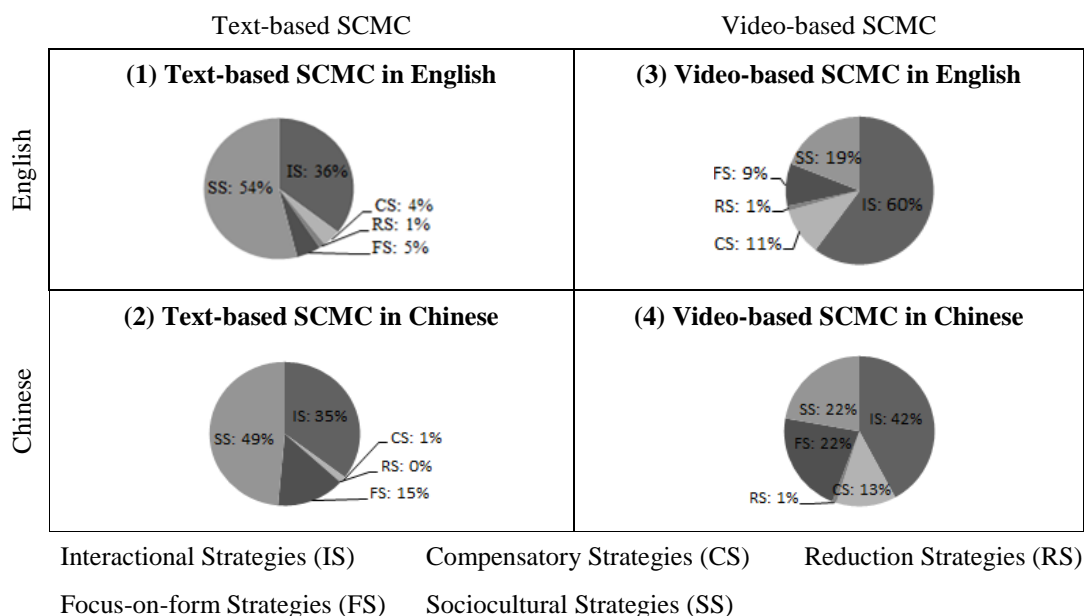
Only five types of CS will be compared in this section since the sub-strategies under the category of paralinguistic strategies are used exclusively in either text-based or video-based SCMC: they can only be used in one medium or the other. In addition, one dyad has to be ruled out in this section since they failed to record their video-based interactions and thus the data is insufficient to make a valid comparison of their used CSs in the two modes of SCMC.

Learners tended to take more turns in video-based SCMC than in text-based SCMC within 30 minutes of time and they also used statistically more CSs. The sum of all used CSs apart from paralinguistic strategies in text-based SCMC is 124 times out of 321 turns and it is 623 times out of 1142 turns in video-based SCMC. The positive correlation between turns and used CSs is significant at the 0.01 level ($r = 0.812$). Such a result does not seem surprising as typing naturally took more time and the number of CS use would probably be accumulated in a more productive conversation. At this point, it appears to be fairer and more meaningful to compare CS use in the two modes of SCMC through the proportion and also the mean of each individual CS use per turn than the number of occurrences.

The percentages of five types of CSs used by learners in the four SCMC settings are shown in figure 5 below. As seen in this figure, reduction strategies were just used infrequently in the four SCMC settings. Moreover, the proportions of sociocultural strategies to all five types of CSs in both English and Chinese video-based interactions were smaller than in text-based interactions. Indeed, both learners of English and learners of Chinese used statistically more sociocultural strategies in video-based SCMC than in text-based SCMC; nevertheless, as the increased number of other CSs is bigger than the increased number of sociocultural strategies, the proportion of sociocultural strategies to all five types of CSs becomes

smaller in video-based SCMC.

Figure 5 The percentages of five types of CSs in the four SCMC settings



Despite the high frequency use, the large proportion of sociocultural strategies compared with all CSs in both English and Chinese text-based SCMC was almost certain to be a co-effect of less use of other types of CSs. Both learners of English and learners of Chinese preferred consulting online resources and editing their unsent messages in text-based SCMC since such environment allowed them to do so without feeling any time or inter-personal pressure. As a result, they did not often use CSs to solve their language problems. On the other hand, learners reported that video-based SCMC compelled them to concentrate on the proceeding conversation in order to give prompt replies. As they did not have extra time to seek for help from other resources, they had to use various CSs to help their interaction and consequently the proportion of sociocultural strategies compared with other types of CSs decreased with the increasing use of other CSs in video-based SCMC.

Both learners of English and learners of Chinese tended to use various CSs

more frequently to help their interaction in video-based SCMC compared with their own performance in text-based SCMC. The frequent use of some strategies in video-based SCMC might result from less time for learners to consult other resources as they often did in text-based SCMC. In addition, some strategies such as input elicitation strategies seemed to be specifically promoted in a video-based SCMC environment as these strategies were not used to solve language problems and the increased use of these strategies in video-based SCMC was less likely to be the results of the decreased use of other resources. Despite the common changes, the distribution patterns of CSs used by learners of English and learners of Chinese in video-based SCMC did not turn out to be similar when the result might be interactionally affected by the different conversational languages or perhaps the difference in learners' language proficiency levels. Learners of English used a great number of interactional strategies in video-based SCMC, which accounts for 60% of occurrences of all CSs, and approximately half of the examples were not related to language problems. They frequently used input elicitation strategies and inferential strategies to promote the conversational flow rather than to solve the language problems. Indeed, the use of inferential strategies was not to overcome language difficulties; on the contrary, its use required a good understanding of the proceeding conversation. Learners of Chinese, on the other hand, tended to use CSs to solve their language problems. Although they also used input elicitation strategies frequently, many other examples of use of interactional strategies were indeed to help their key-word level understandings. They used compensatory strategies, focus-on-form strategies, and sociocultural strategies more frequently than learners of English which might also reflect their lower target language proficiency. It is not surprising that they used a greater number of compensatory strategies as the strategies were mainly to solve the problems of self-expression. Although learners of

Chinese consistently used a greater number of focus-on-form strategies than learners of English in both modes of SCMC, the difference in video-based SCMC is more salient. It is worth noting that many examples of focus-on-form strategies in Chinese video-based SCMC involved repeating the explicit or implicit corrections provided by their interlocutors and also checking the accuracy of their wording or pronunciation. These examples might indicate their attention to the accurate form in a meaning orientated conversation but at the same time also reveal the language problems learners of Chinese encountered during interaction. As regards sociocultural strategies, both learners of English and learners of Chinese frequently used social formulas to establish a positive social relationship with their interlocutors from a different cultural background in the two modes of SCMC; nevertheless, when learners of Chinese used code-switching particularly frequently in video-based SCMC, quite a few examples appear to compensate for the vocabulary deficiencies.

In sum, both learners of English and learners of Chinese tended to use CSs differently in text-based and video-based SCMC. They tended to take time to consult other resources and edit their unsent messages in text-based SCMC, which seemed to reduce the need for some CSs which are mainly to solve the language problems. On the other hand, they tended to use various CSs to help their interaction in video-based SCMC due to a relatively short processing time. Apart from the general trend, the following section intends to pin down the differences in each CS.

6.2.2 Use of Individual CSs in Text-based and Video-based SCMC

Most CSs were used differently in text-based and video-based SCMC by mixed learners of English and Chinese and these differences were statistically significant. According to the results of a MANOVA, differences on sixteen out of twenty two CSs in the two modes of SCMC attained significance at the 0.05 level.

The p-values of individual CSs are presented in table 13 below. It is noted that reduction strategies are not included in this table and also the following comparisons as they were just used rarely in the four SCMC settings and left little data to make any further examination. In addition, the mean occurrence per turn is also provided in table 13 in order to have a different comparative view of CS use in the two modes of SCMC when a positive correlation between the number of turns and CS use is significant at the 0.01 level. Except for the CSs showing no significant difference in the two modes of SCMC, almost all CSs were used more intensively (the mean occurrence per turn) in video-based SCMC than in text-based SCMC. The result seems to suggest that these CSs were actually promoted in a video-based SCMC environment rather than simply being accumulated with more turns. To delve deeper into the use of each CS, the following will move to a closer examination of individual CS use in the two modes of SCMC.

Table 13 Comparisons of CS use in text-based and video-based SCMC

Communication Strategies	Text-based SCMC (N = 12)		Video-based SCMC (N = 12)		Sig.	
	Sum	Mean	Sum	Mean	$p \leq .05$	$p > .05$
Interactional Strategies:						
- Request for Clarification	7	.017	16	.014		.054
- Confirmation Check	3	.007	42	.039	.001	
- Comprehension Check	0	-	5	.006		.058
- Direct Request for Help	1	.002	5	.005	.043	
- Indirect Request for Help	1	.002	21	.021	.000	
- Input Elicitation Strategies	2	.004	108	.099	.000	
- Feigning Understanding	0	-	4	.004	.016	
- Inferential Strategies	15	.045	25	.022		.611
- Framing	9	.029	19	.018		.074
- Verbal Strategy Markers	0	-	45	.042	.000	
- Omission	0	-	5	.005	.024	
- Time-gaining Strategies	4	.006	23	.021	.002	

Compensatory Strategies:						
- Circumlocution	1	.001	11	.009	.016	
- Approximation	1	.001	9	.009	.013	
- Use of All-purpose Words	0	-	6	.007	.047	
- Literal Translation	2	.009	2	.002		.872
- Self-rephrasing	0	-	46	.044	.000	
Focus-on-form Strategies:						
- Self-correction	5	.012	26	.024	.017	
- Meta-talk	4	.015	47	.049	.000	
- Own Accuracy Check	1	.004	29	.032	.009	
Sociocultural Strategies:						
- Social Formula	42	.172	79	.069	.031	
- Code-switching	25	.076	52	.043		.158

Interactional Strategies

The table 13 above is a statistical presentation of the qualitative results elaborated in the previous chapter. As a video-based SCMC environment compelled learners to concentrate on the social interaction and spend less time consulting other resources, they tended to use interactional strategies more frequently in video-based SCMC than in text-based SCMC and the differences of most CSs indeed attained the significance at the 0.05 level. Only four interactional strategies were not used significantly differently in the two modes of SCMC, namely, request for clarification, comprehension check, inferential strategies, and framing. The following will offer some explanations in this regard.

Request for Clarification, Comprehension Check, Inferential Strategies, and Framing: The use of requests for clarification was not significantly different between the two media and between the two languages in terms of frequency; nevertheless, these two conditions appeared to have an interactional effect on its use. Both learners of English and learners of Chinese did not request clarifications

frequently in text-based SCMC when they could easily consult other resources for an unfamiliar term. Learners of English did not use this strategy frequently in video-based SCMC as well since they were at higher level of language proficiency and could generally comprehend their interlocutors' messages. On the other hand, learners of Chinese, who were at lower language proficiency, increased the use of this strategy in video-based SCMC when they did not have time to consult a dictionary. It is noted that learners of Chinese might use a greater frequency of this strategy for unfamiliar terms in video-based SCMC if they did not regularly made confirmation checks. They tended to make confirmation checks to ensure the correctness of what they heard before requesting clarifications. As their interlocutors often gave some clarification along with the confirmations, they did not really ask for clarification afterwards. From this aspect, the use of request for clarification seemed to be interactionally affected by the media and the language proficiencies.

The strategy of comprehension check was used rarely by both groups of learners in both media. Although the analysis shows no media effect on its use, the reason for the infrequent use of this strategy in the two modes of SCMC did not seem the same. Learners did not use this strategy in text-based SCMC as most of them felt confident of their own performance, when they did not use it frequently in video-based SCMC it might because their interlocutors have often shown their understanding through short responses such as "uh huh". Learners tended to make a comprehension check when they were extremely insecure about their output and prepared for output modifications if they got a negative feedback.

The difference in the use of inferential strategies used in the two modes of SCMC is not significant, which might be related to the fact that their use required a good understanding of the preceding conversation and also a certain level of production ability. Learners of English in this study used this strategy consistently

more than learners of Chinese in both modes of SCMC as they were at a higher language proficiency level. Nevertheless, when learners of English used a greater number of inferential strategies in video-based SCMC with more discussed topics compared with their own performance in text-based SCMC, learners of Chinese used this strategy more frequently in text-based SCMC as they might benefit from an extended processing time. Learners of Chinese tended to pay their attention to key-word comprehension and used statistically more request for clarification and confirmation check in video-based SCMC, but an easy access to consult for unfamiliar terms in text-based SCMC might promote their discourse level of comprehension.

The difference in the use of framing in the two modes of SCMC is also not significant. Long (1983) found marking off a new topic was one way to improve input comprehensibility and Smith (2003b) suggested it is essential to compensate for the unavailability of other paralinguistic cues for topic shifts in text-based SCMC as misleading turn taking may cause confusion in the current topic. To find out if the use of framing was promoted in a text-based SCMC environment, the occurrences of its use by two sides of interlocutors were both examined as each topic shift was generally marked by one interlocutor only. Although the number of uses of framing by both interlocutors in video-based SCMC is larger than in text-based SCMC as shown in table 14 below, the difference does not attain significance at the 0.05 level ($p = 0.169$). Indeed, the larger number of examples of framing in video-based SCMC compared with text-based SCMC might just reflect the fact that they went through more suggested questions in video-based SCMC. As a set of questions that are relevant to the suggested topic were provided on the work sheet to help the interaction, participants in this study often clearly marked topic shifts by suggesting moving on to the next question. Most dyads could not go through all the suggested

questions in 30 minutes of time in text-based SCMC, but they had no problem in this regard in video-based SCMC. It is worth noting that learners in this study tended to suggest moving on to the next question when they could not expand proceeding topic and they did not really mark topic shifts when the new topic was elicited by the proceeding one. All in all, the frequency of the use of framing did not seem to be affected by the communication media.

Table 14 Descriptive statistics of use of framing

	Text-based SCMC		Video-based SCMC		Total
	in English	in Chinese	in English	in Chinese	
Learners of English (N = 6)	3	3	4	7	17
Learners of Chinese (N = 6)	9	6	14	15	44
Total	21		40		61

As mentioned earlier, learners preferred using other online resources to solve their language problems in text-based SCMC, but tended to use interactional strategies more frequently in video-based SCMC to avoid long pauses. Except for the aforementioned four interactional strategies, the differences in the use of other interactional strategies in text-based and video-based SCMC all attain significance at the 0.05 level. Indeed, five of them even attain the 0.005 level.

Confirmation Check: As the written nature in text-based SCMC allowed learners to look back at their interlocutors' messages and copy any unfamiliar terms to a simultaneous dictionary without having time and psychological pressures, the infrequent use of confirmation check in text-based SCMC does not seem surprising. On the other hand, it was more difficult for them to consult a dictionary in video-based SCMC when they did not know how to spell the English word or write the Chinese character. Besides, reception problems and inadequate listening ability

might also increase the need to confirm their understanding as well as listening in video-based SCMC. Therefore, they tended to make confirmation checks more frequently in video-based SCMC.

Direct Request for Help, Indirect Request for Help, Verbal Strategy Markers, and Time-gaining Strategies: These four strategies were used more frequently in video-based SCMC than in text-based SCMC, which seemed closely related to the length of processing time. Learners tended to request help frequently in video-based SCMC in order to produce rapid responses, when they tended to take time to come up with a comprehensible expression or consult a dictionary for an intended term in text-based SCMC. It is noted that they often indicated a language problem to elicit help from their interlocutors indirectly rather than explicitly asking their interlocutors for help. That is, the strategy of indirect request for help was used more frequently than the strategy of direct request for help. When the use of a direct request for help often involved using a first language term to get an equivalent word in the target language, the reason they used indirect requests for help more frequently than direct requests for help might be related to the fact that they were encouraged to use the target language as much as possible.

The less frequent use of time gaining strategies in text-based SCMC compared with video-based SCMC might be affected by the effort of typing as well as less time pressure. Learners often repeated their interlocutors' questions to gain some planning time in video-based SCMC, but they never did so in text-based SCMC as the act would actually take some extra time. As regards the use of fillers such as "um", not each occurrence of its use was viewed as one example of time gaining strategies in this study. Similar to Yamada and Akahori's (2007) study, learners in this study also produced a great number of fillers to reply promptly in

video-based SCMC, but the process was not necessarily conscious. On the other hand, using fillers in text-based SCMC was more certain to be a conscious act due to the typing effort. The intention to fill a time gap seemed more overt when learners tended to send the filler and the message separately. At this point, a pause between the filler and the message was viewed a criterion in video-based SCMC to make the use of fillers more comparative in the two modes of SCMC. Take two fillers used by the same learner in video-based SCMC for example, the filler in “Er I watch that, but football is not so popular in Taiwan.” was not viewed as an example of time gaining strategy use, when the filler in “Um:... not not many things, (the rest of message is omitted here).” was coded as one occurrence of its use.

Verbal strategy markers were used much more frequently in video-based SCMC than in text-based SCMC. As a text-based SCMC environment allowed learners to consult other resources and edit their unsent messages with less time pressure, they did not really need to use verbal markers to indicate the uncertain target language expression and to prepare for rephrasing. On the other hand, they often rephrased their own expressions or used other CSs to ensure the comprehensibility of their messages in video-based SCMC due to the relatively short planning time. Accordingly, the use of verbal strategy markers was in greater need in video-based SCMC compared with text-based SCMC.

Input elicitation strategies: This was the most frequently used strategy among all CSs used in video-based SCMC and its use seemed to be promoted in a video-based SCMC environment. Learners often showed their interest and understanding by giving short responses in their interlocutors’ turn space and thereby encouraged their interlocutors to continue talking. When they passed a large number of continuation signals in their interlocutors’ turn space in video-based SCMC, such

usage was not really possible in text-based SCMC. Indeed, they tended to be patient with waiting for their interlocutors' messages in text-based SCMC rather than frequently using input elicitation strategies due to the awareness of typing time. As a result, the difference of its use in text-based and video-based SCMC attained significance at the 0.001 level.

Feigning Understanding and Omission: Despite the significant differences in their occurrences in the two modes of SCMC, these two strategies were not the most frequently used CSs in the both modes of SCMC. Although almost all participants in this study reported feigning understanding occasionally to avoid frequent interruptions, some successful attempts at feigning understanding could not be identified in the interaction data. At this point, the comparison of its use in the two modes of SCMC in terms of frequency might be invalid. As regards the strategy of omission, it was not really applicable in text-based SCMC since a written nature did not allow learners to "pretend" a word has been said and carry on the talk. It is noted that Smith (2003b) found the occasional use of omissions in his study of text-based SCMC; nevertheless, he did not present any examples of its use and thus it is difficult to compare with his result. Learners did use this strategy occasionally in video-based SCMC. Although their interlocutors did not show any problems in comprehending the message with one word skipped, they did not really react to or offer any suggested words for the gap either.

Compensatory Strategies

The differences in use of all compensatory strategies in text-based and video-based SCMC all attained significance at the 0.05 level, apart from literal translation.

Literal Translation: As it was a tandem learning interaction, learners tended to use a first language term rather than literal translation to compensate for the vocabulary deficiencies in both modes of SCMC. Accordingly, the use of literal translation did not appear to be different in the two modes of SCMC.

Circumlocution, Approximation, and Use of All-purpose words: As consulting a dictionary appeared to be an easy and preferred substitute for learners to solve the lexical problems of self-expression, these strategies were used rarely in text-based SCMC. The larger number of these three strategies used in video-based SCMC might just reflect that learners did not have much time to consult a dictionary. Although the differences of these three strategies use in the two modes of SCMC were significant at the 0.05 level, these three strategies were not used particularly frequently in video-based SCMC either. The infrequent use of these compensatory strategies might be related to the task design in this study. As learners could talk freely about the suggested topic without being required to use particular lexical items, they might avoid using unfamiliar lexical items. Indeed, many learners reflected in an after-task questionnaire that they tended to express with familiar words or sentence patterns as many as possible to ensure the comprehensibility of their expressions. In other words, they might only use these strategies to compensate for the lexical deficiencies when the particular lexical items were essential to their intended messages.

Self-rephrasing: This strategy was used quite frequently in video-based SCMC. As learners had to plan and express their messages almost simultaneously in video-based SCMC, they often felt the need to rephrase their own utterances due to their inability to complete the proceeding message or if there was uncertainty about the comprehensibility of the produced message. On the other hand, they never

rephrased their sent messages in text-based SCMC as they tended to edit their messages before sending them out. The difference in its use between text-based and video-based SCMC attained significance at the 0.001 level.

Focus-on-form Strategies

The differences of three focus-on-form strategies used in the two modes of SCMC are all significant at the 0.05 level and the strategy of meta-talk attained the 0.001 level. These differences in both meta-talk and own accuracy check in text-based and video-based SCMC might reflect the high frequent use of these two strategies by learners of Chinese in video-based SCMC. Indeed, the result shows not only media and languages effects but also an interactional effect of medium and language on these two strategies. The language effect and interactional effect will be addressed later when comparing the use of CSs in the two conversational languages.

Self-correction: Learners tended to correct different types of mistakes in the two modes of SCMC apart from the difference in frequency. Learners did not make corrections to the grammatical mistakes in text-based SCMC as they tended to edit their unsent messages and might have corrected the mistakes they noticed. In addition, consonant with the previous studies (e.g. Lee, 2002b; Murray, 2000), learners in this study tended to accept the surface mistakes and often left the typographical mistakes uncorrected. Most examples of self-correction in text-based SCMC were to correct the tonal mistakes in Chinese text-based SCMC. Chinese is a tonal language and the four tones in Chinese are essential to convey meaning of what is being said. Although Kitade (2000) found that interactive written discourse helped learners notice their phonological errors in phonetic languages, there seemed no warrant to infer the effect on Chinese as its writing system is either ideographic or

ideo-phonographic. When pinyin (or zhuyin in Taiwan), the official phonetic system to transcribe Chinese characters, is often used as an input method to enter Chinese characters into computers, the typing also involves entering the correct tone. This typing method allows learners of Chinese to be aware of the correspondence between a Chinese character (an ideographic word) and its pronunciation. Learners in this study did notice their tonal mistakes through the incorrectly typed word as they often corrected a lexical item by using another tone (e.g. correct the word “沒 (měi; no)” to “每 (měi; every)”). As regards video-based interaction, both learners of English and learners of Chinese corrected their pronunciation and wording, and learners of English also corrected their grammatical mistakes in video-based SCMC. It seemed that both learners of English and learners of Chinese corrected a wider range of mistakes and made statistically more self-corrections in video-based SCMC compared with text-based SCMC; nevertheless, it should be borne in mind that the study did not investigate the unsent messages in text-based SCMC. As some grammatical mistakes in text-based SCMC might be corrected when learners edited their unsent messages, this factor needs to be taken into account by studies which aim to focus on this single strategy.

Meta-talk and Own Accuracy Check: Both strategies were used more frequently in video-based SCMC than in text-based SCMC. Most examples of meta-talk in video-based SCMC were indeed the repetitions of their interlocutors' implicit or explicit corrective feedback and also their language help. Participants in this study did not often make an explicit correction to their peer's mistake in their first language conversation when the message was comprehensible. Nevertheless, they did sometimes mention the correct target language words/terms when responding to their peer's message and thereby provided an implicit correction. In

addition to corrective feedback, they also provided some language help as requested by learners. Learners often repeated the accurate terms/phrases they noticed in their interlocutors' talk in video-based SCMC, but not in text-based SCMC. The difference might be because oral repetitions took less effort (more automatic) than typing or they felt less need to repeat for memory in text-based SCMC since they could review the text anytime they wanted. Regardless of the reason, this type of meta-talk seemed to be promoted in a video-based SCMC environment, when other types of meta-talk such as discussing a particular target language usage in the target language did not seem to be affected by the different media. As the large proportion of meta-talk in this study is repetitions of an accurate term/phrase, the difference of meta-talk in the two modes of SCMC is significant at the 0.001 level.

The strategy of own accuracy check was also used more frequently in video-based SCMC than in text-based SCMC. The difference might be partially affected by the fact that checking the accuracy of one's own pronunciation only occurred in video-based SCMC, but not in text-based SCMC. Besides, learners often said a particular term in a rising intonation to check its accuracy in video-based SCMC and the checking sometimes would go with an equivalent in their first language to ensure the comprehensibility; nevertheless, they did not often do so in text-based SCMC as they might benefit by extended processing time in text-based SCMC and have consulted a dictionary instead.

Sociocultural Strategies

Sociocultural strategies investigated in this study include social formula and code-switching. When the difference in social formula between the two modes of SCMC is significant at the 0.05 level, the difference in code-switching does not attain statistical significance. The following will present the investigation of use of

these two strategies in the two modes of SCMC.

Social Formula: Although the total use in video-based SCMC is greater than in text-based SCMC, the strategy seemed to be used more intensively in text-based SCMC in terms of the mean occurrence per turn. Learners in this study used social formulas in the target language for greetings and leave-takings in almost all interactions. Each interaction is a complete episode, in which interlocutors generally greeted with each other to initiate the conversation and took leave at the end, regardless of the number of taking turns. Indeed, these regularly occurred examples might explain the more intensive use of social formula in text-based SCMC than in video-based SCMC when all text-based interactions consisted of much fewer turns than video-based SCMC in this study. In addition to greetings and leave takings, learners also used polite formulas for other social purposes such as apologies for their inadequate language ability and appreciations for their interlocutor's cultural sharing or language help. These situational expressions occurred irregularly but the number of their occurrences was most likely to increase with more taking turns, which could probably explain a greater number of social formulas used in video-based SCMC. Overall, the use of social formulas in this study seemed to indicate learners' intention to show a positive 'face', which Goffman defined as "the public self- image" (as quoted in Marti, 2006, p.1838). From this aspect, social formula is largely overlapped with politeness. Smith (2003b) found the high level of politeness in his study of text-based SCMC, which he explained that being explicit polite might be one way for interlocutors to ensure their engaging in cooperative behaviour in a sensory limited communication environment such as text-based interaction. Despite the frequent use of polite formula for requesting repetitions or clarifications in video-based SCMC due to the bad

reception or inadequate listening abilities, some learners in this study seemed to show a higher degree of politeness in text-based SCMC than in video-based SCMC. Take one learner of Chinese for example, she typed a polite formula “谢谢！(Thank you!)” in response to her peer’s experience sharing and also to mark the closure of the old topic before moving on to the next suggested question in the worksheet in text-based SCMC, but she just said “好的 (good)” in video-based SCMC for the same purpose. Another learner politely answered to her interlocutor’s question about if she heard of a Sunday Roast by “sorry I haven’t, but I suppose it must be a good one.” in text-based SCMC. Although this learner also used a greater number of “sorry” in video-based SCMC, most examples were prompt reactions when she could not clearly hear her peer’s talk. These reactions in video-based SCMC did not appear to be as well planned as the aforementioned example in text-based SCMC. These two cases seem to partially support Smith’s findings at this particular point from a qualitative perspective.

Code-switching: The use of this strategy tended to be more complicated to explain when it was sometimes used to compensate for vocabulary deficiencies in the target language. Its use appeared was not significantly different between different media as well as between different groups of learners in terms of frequency. The use of code-switching in this study seemed to depend on the context. Despite the occasional use of code-switching to compensate for vocabulary deficiencies, both learners of English and learners of Chinese tended to switch to their first language when introducing their native culture. Accordingly, the difference in its use in the two modes of SCMC was not statistically significant.

6.2.3 Discussion of CS Use in Text-based and Video-based SCMC

This section aims to summarize the differences between text-based and video-based SCMC in the use of CSs and also to connect the findings with the previous studies, although there appeared to be limited studies of CS use in SCMC and video-based SCMC in particular.

Learners used all six types of CSs in both text-based and video-based SCMC, but the distribution patterns of CS use in the two modes of SCMC were quite different. While sociocultural strategies were the most frequently used CSs in text-based SCMC, interactional strategies were used heavily in video-based SCMC. Indeed, these two types of CSs were used quite frequently in both modes of SCMC. The difference might be because the short processing time in video-based SCMC boosted a greater demand for using various interactional strategies to manage and repair discourse. On the other hand, the large proportion of sociocultural strategies used in text-based SCMC might reflect learners' intention to ensure the building of social relationships in a sensory restricted communication environment.

To help identify what individual CSs might be promoted in either text-based or video-based SCMC, the most frequently used CSs are listed in table 15 below. As seen in this table, the two sociocultural strategies, social formula and code-switching, were used frequently in both text-based and video-based SCMC. Despite a higher demand for using polite formulas to ensure the participation in a collaborative social interaction in text-based SCMC due to the sensory restrictions, a social relationship itself is indeed the same important to both modes of SCMC. Therefore, learners also used social formula largely in video-based SCMC to sustain a social relationship. It is worth noting that sociolinguistic competence is important to successfully engage in a social interaction and its development should not be overlooked when learning a target language (Canale & Swain, 1980; Canale, 1983). Despite only a minimal level

of sociolinguistic competence involved according to ACTFL Proficiency Guidelines (as seen in Chun, 1994), the use of social formula in both modes of SCMC shows the potential for developing sociocultural competence through social interaction in both text-based and video-based SCMC.

Table 15 The most frequently used CSs by mixed learners of English and learners of Chinese in the two modes of SCMC

Text-based SCMC	Video-based SCMC
1. Social Formula (SS; 48 times, 33.33 %*)	1. Input Elicitation Strategies (IS; 108 times, 17.12 %)
2. Code-switching (SS; 26 times, 18.06 %)	2. Social Formula (SS; 79 times, 12.52 %)
3. Inferential Strategies (IS; 21 times, 14.58 %)	3. Code-switching (SS; 52 times, 8.24 %)
4. Framing (IS; 10 times, 6.94 %)	4. Meta-talk (FS; 47 times, 7.45 %)
5. Self-correction (FS; 9 times, 6.25 %)	5. Self-rephrasing (CS; 46 times, 7.29 %)
6. Request for Clarification (IS; 7 times, 4.86 %)	6. Verbal Strategies Markers (IS; 45 times, 7.13 %)

* The proportion of this strategy use to all used CSs excluding paralinguistic strategies.

In addition to social formula, learners in this study also used code-switching frequently to help their intercultural interaction. It is noted that switching to a first language term to facilitate the use of other CSs such as request for help was not viewed as one example of code-switching in this study to avoid double coding. Most examples of code-switching in this study were to introduce learners' native culture and only some examples made by learners of Chinese in video-based SCMC were to compensate for the vocabulary deficiencies. Consistent with Kost's (2008) study, this study also found possible effects of topics and proficiency levels on the frequency of code-switching use. Nevertheless, when Kost found an increasing use of code-switching in topics that required learners to express their individual and personal experiences as more unfamiliar terms (terms that have not been explicitly

taught¹) might be involved, this study found the frequent use of code-switching by learners to introduce their native culture for the two cultural-related topics, local delicacies and festivals. The difference might be related to the attempt this study made to exclude the use of first language terms embedded in other CSs. It is noted that some examples of code-switching for vocabulary deficiencies could not be excluded as their use did not mix with any other CSs. Such examples were mostly made by learners of Chinese in video-based SCMC, which indeed corroborates Kost's finding about the negative relation between language proficiency and the frequency of code-switching use. Learners of Chinese in this study were at a lower level of language proficiency than learners of English and the difference became salient in video-based SCMC as they had less spare time to consult a dictionary.

Except for the two sociocultural strategies, there appeared to be no other strategies used frequently in both modes of SCMC. As this study did not rigidly ban the use of other resources, learners in this study tended to take the advantage of a text-based SCMC environment to consult online resources. Written discourse not only provided an easy access for learners to copy any non-comprehended lexical items to an online dictionary but also allowed them to edit their unsent messages. Accordingly, learners did not often use CSs to solve the language problems of non-comprehension and self-expressions in text-based SCMC. Indeed, except for request for clarification, the other five CSs in text-based SCMC as seen in table 15 above were not mainly to solve the language problems in terms of their functions. Inferential strategies were used to develop a discourse with the interlocutors. Its use required a higher level of language proficiency and did not seem to be largely affected by the media. The fact that learners of Chinese used statistically more

¹ As participants in her study were from two intact classes and the tasks were designed to recycle the learned materials in these classes, it is relatively easy to define learned and unlearned materials.

inferential strategies in text-based SCMC than in video-based SCMC seemed to consistent with learners' reflection that they were more capable of comprehension and expression in text-based SCMC. Framing as another frequently used CS was to improve the comprehensibility by clearly marking off topic shifts (Long, 1983; Smith, 2003b). As some learners in this study tended to use this strategy to explicitly close a topic that they were unable to expand further in both modes of SCMC, its use did not seem to be promoted in a text-based SCMC environment as Smith (2003b) suggested. It is noted that the analysis in this study show no significant differences between text-based and video-based SCMC on frequency of both inferential strategies and framing.

The strategies of request for clarification, confirmation check, comprehension check and request for help were used by studies of text-based CMC (e.g. Lee, 2001, 2002b) to examine the potential for a target language acquisition grounded in Long's interaction hypothesis (1996). Although the number of requests for clarification in text-based SCMC was not particularly large, it was indeed one of six most frequently used CSs in text-based SCMC. Therefore, the finding is somewhat consistent with Lee's (2001, 2002b) and Kost's (2008) studies in that it was one of the most frequently used CSs. Although the difference was not significant, the number of occurrences of this strategy in video-based SCMC is greater compared with text-based SCMC. An easy access to consult other resources for lexical terms in text-based SCMC appeared to reduce the demand for its use. Most examples of requests for clarification in text-based SCMC were to get the situational meaning. In contrast, the use of requests for clarification increased in video-based SCMC when the processing time was insufficient to use other resources. Besides, the inadequate listening abilities and the incapability of transcribing what they were hearing also prevented the use of other resources. It is worth noting that

learners in this study tended to confirm what they heard prior to a request for clarification and their interlocutors often gave some explanations rather than a simple confirmation. From this aspect, these two strategies seemed closely connected in video-based SCMC. In addition to requests for clarification, Lee (2002b) also found frequent use of requests for help in negotiated interaction. Learners in this study did not often request help for their expressions in text-based SCMC as discussed above. Nevertheless, they did request help much more frequently in video-based SCMC, particularly indirect requests for help, in order to give prompt responses. Although both text-based SCMC and video-based SCMC have potential for target language acquisition in terms of the affordance of negotiated interaction, the frequency of interactional modification strategies use seemed to be affected by the different mode of SCMC. The extended processing time in text-based SCMC appeared to promote the use of other resources and thereby reduce the demands for interactional modifications. Moreover, requests for clarification and confirm checks were used consistently more than the other three strategies in both modes of SCMC. While these two strategies are to ensure the comprehension of input and the other three are to ensure the output comprehensibility, the result might suggest a greater demand for interactional modifications to solve the problems of comprehension than the problems of expression.

Despite being in meaning-oriented interactions, learners in this study also showed their form-focus reflection in SCMC through the use of three focus-on-form strategies, namely, self-correction, meta-talk, and own accuracy check. Whereas noticing is essential for target language acquisition (Schmidt, 1990), Swain and Lapkin (1995) suggested that the activity of producing target language may on occasion prompt learners become aware of their linguistic problems and make output modifications. Along these lines, studies (Kitade, 2000; Lai & Zhao, 2006; Lee,

2008; Shekary & Tahririan, 2006; Smith, 2008) suggested that the written nature and the extended processing time in text-based SCMC enhance the processes of noticing. The finding that self-correction was one of six most frequently used CSs in text-based SCMC appears to corroborate the previous studies that the written discourse facilitates the noticing of target language form. Most examples of self-correction in text-based SCMC were indeed to correct the tonal mistakes in Chinese conversation. These examples might suggest the potential of a text-based interaction for the phonological awareness in Chinese, a non-phonetic language. Apart from the tonal corrections, there are also few corrections to the wording and typographic mistakes, although most learners tended to accept the surface mistakes. It is worth noting that as the topics asked tandem learning dyads to exchange their life experience or personal opinions, two learners attempted to copy their interlocutors' terms and sentence patterns when expressing some similar points. These examples might also suggest the benefit of learning target like language forms in written discourse as learners could look back at what they have noticed and reinforced their awareness. Despite the effect of text-based SCMC on enhancing their noticing, learners indeed made a greater number of self-corrections to correct their wording, pronunciation, and grammatical mistakes in video-based SCMC. The quantitative differences between the two modes of SCMC in the use of self-correction might be related to the corrections made in unsent messages. Smith (2008) found a smaller number of self-repairs in chat logs than in a screen capture record. Therefore, he argued the repairs somewhere between overt and covert were missing in chat logs. As learners in this study tended to edit their unsent messages, some repairs might be made in this stage. That is, learners' noticing of their linguistic problems in text-based SCMC might be underestimated in terms of the frequency of self-correction observed in chat logs.

Meta-talk was one of most frequently used CSs in video-based SCMC and most examples of its use were to indicate learners' perceptions of the correct form they noticed from their interlocutors' responses. Most participants in this study did not explicitly correct their peer's language mistakes when they served the role as a language expert; nevertheless, they on occasion gave implicit corrections (i.e. recasting) and often offered language help in response to learners' direct or indirect requests. In addition, they sometimes unintentionally offered a corrected form of learners' lexical mistakes when responding to learners' messages. When implicit and incidental corrections might easily be overlooked, Egi (2010) found a positive correlation between the uptake and the awareness of recast in his study. Learners who reacted to their interlocutors' recasting often recognized the recasting as implicit correction, while learners who did not give a reaction often overlooked the correction and viewed the recasting as the response their interlocutors gave to show achieved agreement. Learners in this study often repeated the correct form or on occasion applied it to their messages that indicated their awareness of the correct form in different types of feedback, although such reactions might not engage learners as actively as negotiation of form (Lyster & Ranta, 1997). It is noted that despite the indication of noticing, the greater number of examples of meta-talk in video-based interactions does not indicate that video-based SCMC promoted noticing, but rather indicates repetitions as one type of indicative reaction promoted in a spoken discourse. Indeed, some types of recasting seemed to be easily missed in video-based SCMC. Learners of English often missed the corrections to plural nouns made by their interlocutors such as correcting the mistake of "sheeps" to "sheep" and "milks" to "milk". The ending "s" might be easier for learners to notice in written discourse. From this aspect, the result corroborated Lee's (2008) suggestion that focus-on-form is more salient in text-based SCMC. Moreover, despite few

occurrences of meta-talk in text-based SCMC, three out of four examples involved discussing or asking information about one particular language usage learners noticed in their interlocutors' messages, which probably engaged learners in higher level of form reflection than the repetitions of a correct form. Overall, text-based SCMC seemed to be more effective to enhance noticing video-based SCMC.

As the most frequently used CSs in video-based SCMC, the use of input elicitation strategies, self-phrasing, and verbal strategy markers seemed to be promoted in a video-based SCMC environment. Input elicitation strategies were used much more frequently than all the other CSs in video-based SCMC. Most examples involved giving short responses in the primary speaker's turn space as continuation signals. In contrast, learners tended to wait patiently for their interlocutors' typing messages in text-based SCMC due to their awareness that overlapped typing might damage the adjacent turn and make the interaction difficult to read. Kost (2008) also suggested that learners did not feel the need to show their listening through short responses due to the lack of social presence (the interlocutor's image) in text-based SCMC. Similarly, they also did not feel the need to use time-gaining strategies in text-based SCMC. Indeed, there is a divergent finding between Kost's (2008) study and Smith's (2003b) study in this regard. Kost found no occurrence of this strategy in her study, whereas Smith found it was used heavily in his study. Smith suggested these explicit signals could help interlocutors to be tolerant of extended pauses in text-based SCMC when other non-verbal cues were unavailable. The result in this study appears to corroborate Kost's study when this strategy was used more frequently in video-based SCMC than in text-based SCMC.

The high occurrences of self-rephrasing and verbal strategy markers in video-based SCMC might also be affected by this communication environment. Learners often felt insecure about the comprehensibility of their expressions in

video-based SCMC due to a relatively short planning time. As a result, they often rephrased their own expressions to ensure output comprehensibility. In contrast, learners never rephrased their sent messages in text-based SCMC since they tended to edit their messages before sending them out. Similarly, they did not really use verbal strategy markers in text-based SCMC either. As they often consulted a dictionary and edited their unsent messages, they did not really need to use this strategy to signal their interlocutors about less than perfect language use or to prepare for rephrasing.

Both learners of English and learners of Chinese used a great number of paralinguistic strategies to compensate for the sensorily restricted communication environment in text-based SCMC. These paralinguistic strategies were indeed the most frequently used CSs in text-based SCMC compared with all the other CSs; nevertheless, as they can only be used in text-based SCMC, the use of these strategies is not discussed in this section when comparing the use of CSs in text-based and video-based SCMC. Moreover, these strategies seemed to be language specific. Substitution is one of the most frequently used CSs in Smith's (2003b) study, but the result in this study shows that its use was restricted in Chinese interaction. To know the relation between these paralinguistic strategies and the conversational language, this regard will be further discussed in the following section when comparing CS use in different conversational languages.

6.3 Comparisons between Learners of English and Learners of Chinese on CS Use in SCMC

This section is to compare the use of CSs by learners of English and learners of Chinese in SCMC and thereby answer the third research question in this study. Except for the paralinguistic strategies used to compensate for the sensory

restrictions in text-based SCMC, the direct effects of the conversational language on CS use are likely limited as CSs in this study are mainly defined by their functions rather than the linguistic differences. According to the results presented in the previous chapter, the differences between learners of English and learners of Chinese on CSs use appeared to be less salient than the differences between the two modes of SCMC. Nevertheless, consistent with Tarone's (1980) suggestion, learners of English and learners of Chinese did have their own preferences for particular CSs, which seemed related to their cultural background. The similarities in the use of CSs by learners of English and learners of Chinese have been largely presented in the previous section when comparing CS use in the two modes of SCMC and some differences have been marked. As each individual CS has been discussed when comparing its use in the two modes of SCMC, the following will focus on both qualitative and quantitative differences between learners of English and learners of Chinese on CS use with a specific consideration of the different communication media since the previous section has suggested the media effect on some particular CSs. The second part of this section will then discuss the differences as well as the similarities between the two groups of learners on CS use to ensure the completeness of the comparisons.

6.3.1 Differences between Learners of English and Learners of Chinese in CS Use in SCMC

The differences between learners of English and learners of Chinese in terms of the occurrences of most CSs do not attain significance at the 0.05 level. As shown in table 16 below, only six CSs are significantly different at this level. This section will discuss the differences in these six CSs as well as request for clarification, which was affected by the combination of the conversational language

and communication medium, but not either factor alone. In addition, some CSs such as self-correction and code-switching that were used similarly by learners of English and learners of Chinese in terms of frequency but were different from a qualitative perspective are also discussed in this section. Finally, this section will address paralinguistic strategies, particularly those were used to compensate for the sensory restrictions in text-based SCMC, since these strategies appeared to be language and culturally specific.

Table 16 Tests of language effects and interactional effects of media and languages on CS use

Communication Strategies	English (N = 13)		Chinese (N = 13)		Languages	Media* Languages
	Sum	Mean	Sum	Mean	$p \leq .05$	$p \leq .05$
Interactional Strategies:						
- Request for Clarification	7	.009	16	.018	-	.038
- Confirmation Check	18	.015	27	.028	-	-
- Comprehension Check	1	.001	4	.004	-	-
- Direct Request for Help	0	-	6	.006	.006	.043
- Indirect Request for Help	7	.006	15	.016	-	-
- Input Elicitation Strategies	68	.056	42	.039	-	-
- Feigning Understanding	3	.002	7	.001	-	-
- Inferential Strategies	36	.054	10	.023	-	-
- Framing	7	.011	22	.034	.017	-
- Verbal Strategies Markers	32	.027	14	.015	-	-
- Omission	1	.001	4	.003	-	-
- Time-gaining Strategies	21	.019	7	.008	.021	-
Compensatory Strategies:						
- Circumlocution	5	.004	7	.005	-	-
- Approximation	3	.003	7	.007	-	-
- Use of All-purpose Words	0	-	6	.006	.047	.047
- Literal Translation	1	.004	3	.005	-	-
- Self-rephrasing	24	.020	22	.021	-	-
Focus-on-form Strategies:						

- Self-correction	19	.021	16	.023	-	-
- Meta-talk	9	.011	42	.046	.000	.001
- Own Accuracy Check	3	.003	27	.031	.024	.035
Sociocultural Strategies:						
- Social Formula	72	.125	55	.111	-	-
- Code-switching	24	.054	54	.059	-	-
Paralinguistic Strategies:						
- Mime	4	.008	30	.051	-	NA
- Use Text/Symbols to Display the Effects of Intonation	19	.071	2	.009	-	
- Use of emoticons	17	.082	10	.064	-	
- Punctuation	42	.229	75	.415	-	
- Substitution	15	.052	0	-	-	

Request for Clarification: The use of this strategy was not affected by either conversational language or communication medium alone, but affected by these two factors interactively. Both learners of English and learners of Chinese did not often request clarifications for unfamiliar lexical items in text-based SCMC due to the easy access to consult other resources; nevertheless, whereas learners of English used almost the same number of this strategy in video-based SCMC, learners of Chinese used it a greater number of times in video-based SCMC. The infrequent use of this strategy by learners of English in both modes of SCMC might just reflect learners of English who were at a higher level of language proficiency needed less help with the comprehension of particular lexical items. In contrast, learners of Chinese who were at a lower level of language proficiency seemed to rely on this strategy to balance the comprehension and the pace of conversation (prompt reply) in video-based SCMC.

It is noted that the repetitions of the trigger in a rising intonation to ensure one heard something correctly were viewed as one type of confirmation check in video-based SCMC, but such examples were somewhat overlapped with requests for clarifications in text-based SCMC. Learners often typed the trigger with a question

marker rather than a fuller question when requesting clarifications in text-based SCMC to save typing efforts. Besides, when learners repeated the trigger to confirm what they heard, they often received some explanation along with a confirmation as responses. Despite the overlapping parts, it might be inappropriate to integrate the repetitions into the use of request for clarification, particularly when the function of confirmation check was important with the incorrect repetitions and the triggers were obvious examples of mishearing. Therefore, it might be more appropriate to keep the original coding, but be aware of the overlapping parts. The use of confirmation check to ensure the correctness of comprehension is much easier to identify. Learners of English tended to make a confirmation check of the overall message by asking “You mean...?”, when learners of Chinese often used a first language term to ensure their understanding of a target language term. The difference might suggest that learners of English allotted their attention more on the overall meaning, when learners of Chinese focussed more on the comprehension of lexical items. The result is consistent with Rost and Ross’s (1991) study that advanced learners tended to allot attentions to the overall discourse and explains why learners of English did not often request clarifications for particular lexical items.

Direct Request for Help: This strategy was used infrequently by both learners of English and learners of Chinese in text-based SCMC as learners probably consulted a dictionary instead. Nevertheless, while learners of English never used this strategy in either text-based or video-based SCMC, learners of Chinese used this strategy more frequently in video-based SCMC than in text-based SCMC. The use of this strategy appeared to be affected by the language and by combination of the language and the medium. Indeed, the difference is probably affected by learners’ language proficiency rather than the language itself. Most examples involved using a

first language term as an indicator to request help with a target language term. Such use might be to save efforts in negotiation, but it also possibly reflected learners' incapability of making further attempts in the target language. From this aspect, the result is consonant with Kost's (2008) finding that learners with lower language proficiency tended to use code-switching more frequently.

Framing: Learners of Chinese used this strategy consistently more than learners of English in both modes of SCMC and in both conversational languages. The result might suggest that learners of Chinese tended to be more dominant in controlling the conversational pace in tandem learning interaction. The domination was indeed less important in Chinese conversation as learners of Chinese seemed to allot their attention more on their own language problems and learners of English tended to be more confident to take the control in their first language. In addition, learners of Chinese reflected that they on occasion explicitly marked the closure of an old topic as they realized they might be unable to further expand it. From this aspect, the frequent use of framing by learners of Chinese when communicating in the target language might be partially affected by their inadequate language abilities.

Apart from the aforementioned strategies, learners of Chinese also used the other interactional modification strategies, namely, confirmation check, comprehension check, and indirect request for help, more frequently than learners of English. The more frequently used of these strategies seem to reflect the lower language proficiency learners of Chinese had. The use of framing was on occasion used to avoid talking further about a topic and all the interactional modifications strategies were to repair or prepare for the repair works. The frequent use of interactional modification strategies (68 occurrences, which accounts for 40.48 % of the total use of interactional strategies) might also reflect the intention to closely and

actively participate in interaction as the use of these strategies requested interactive responses from their interlocutors. Learners of English, on the other hand, did not often use interactional modification strategies (the proportion to all interactional strategies use is 16.41%). They tended to use the other interactional strategies more frequently to promote the conversational flow or to prevent the conversational breakdown, although the differences between learners of English and learners of Chinese on these strategies used to manage discourse were not at significant level except for time-gaining strategies.

Time-gaining Strategies: The difference between learners of English and learners of Chinese in the use of time-gaining strategies might partially be affected by the language proficiency. Learners of English often repeated their interlocutors' questions either partially or completely to gain planning time. On the other hand, learners of Chinese had to ask their interlocutors to repeat the question or give some explanations sometimes due to their inadequate listening abilities. Indeed, most examples of time-gaining strategies used by learners of Chinese involved explicitly asking their interlocutors to wait while they read through the questions, if they knew the questions were on the worksheet, or even waiting while they consulted a dictionary. As they have spent time on figuring out the questions, they might feel the need to give responses right away without taking time to plan their messages.

Use of All-purpose Words: As compensatory strategies are mostly to compensate for the lexical deficits, it is unsurprising learners of Chinese used this type of strategy more frequently than learners of English, although only the difference in use of all-purpose words attains significance. As this strategy appeared to be less elaborate than the other compensatory strategies such as circumlocution and approximation, it was probably preferred by learners with lower level of

language proficiency. It is noted that this strategy might on occasion need to use with other CSs. For example, one learner of Chinese used an all-purpose word “那個 (that one)” to replace “看手相 (palm reading)”. The replacement was comprehensible only because it occurred in the discourse on the fortune telling and the learner also pointed at her own palm to provide a non-verbal aid. The occasional need for other aids might explain why this strategy was only used in video-based SCMC.

Meta-talk and Own Accuracy Check: Both learners of English and learners of Chinese used these two focus-on-form strategies more frequently in video-based SCMC than in text-based SCMC; nevertheless, unlike learners of English who only increased the use slightly in video-based SCMC, learners of Chinese used these two strategies very frequently in video-based SCMC. Most examples of meta-talk in video-based SCMC were the repetitions of the correct forms they noticed in their interlocutors' corrective feedback or language help. While all learners of Chinese repeated what they noticed in their interlocutors' talk, only few learners of English did so occasionally. The difference might reflect learners of Chinese allotted their attention largely to lexical items.

Learners of Chinese also used own accuracy check more frequently than learners of English in video-based SCMC. Learners of English only checked accuracy of their pronunciation, while learners of Chinese not only checked the accuracy of their pronunciation but also their wording. One learner of Chinese checked the accuracy of his wording by asking “...海邊, 嗯海灘? Beach? (seaside, um beach? Beach?)”. The use of this strategy reflected learners' uncertainty of and their intentions to use accurate forms in the target language.

Self-correction: The difference in self-correction used by learners of English and learners of Chinese did not attain statistical significance; nevertheless, the types of mistakes they noticed and corrected were quite different (as shown in table 17 below). All three examples of self-correction in English text-based SCMC were made by the same learner to correct her typing/spelling mistakes (e.g. corrected “Chian” to “China”). On the other hand, four out of six examples in Chinese text-based SCMC were to correct the tonal mistakes and the other two were to correct the wordings. One learner of Chinese typed “我沒天都想大溪地島 (I think of Tahiti no day)”, but he soon realized he mistakenly typed “每 (měi; every)” to “沒 (méi; no)” and made a correction by typing, “每* 我打錯了 (every* I typed it wrong)”. The written character seemed to prompt his attention to the tonal mistake, although the learner himself stated it was just a typing mistake. In addition, using pinyin as the typing method could also prompt the phonological awareness as the method required knowing the pronunciation in order to type the intended word.

Table 17 The types of mistakes corrected by learners of English and learners of Chinese in SCMC

	Typing*	Pronunciation	Wording	Grammar	Total
Learners of English	3 (15.79 %)	0 (0 %)	0 (0 %)	16 (84.21 %)	19 (100 %)
Learners of Chinese	4 (25 %)	5 (31.25 %)	7 (43.75 %)	0 (0 %)	16 (100 %)

* Typing mistakes include spelling mistakes in English conversation and tonal mistakes in Chinese conversation.

Learners of Chinese indeed corrected the same type of mistakes in both modes of SCMC, which are wordings and pronunciation (the use of a correct tone). The use of a correct tone seemed to be a common problem for most learners of Chinese. They consistently corrected their tonal mistakes in both modes of SCMC

which might reflect their awareness of this problem. Learners of English only corrected grammatical mistakes in video-based SCMC. Learning grammar indeed accounts for a large proportion of learning experience of most Taiwanese learners. English is one of the required courses in the six years of Taiwanese high school education and grammar is important for students to pass these courses as well as exams for various purposes such as to qualify for attending university. Such learning experience might partially explain they often monitored their grammar use and made corrections to the grammatical mistakes.

Code-switching: The use of this strategy by learners of English was mostly to present the uniqueness of their native culture as well as to show familiarity. Although learners of Chinese used this strategy for more types of social functions, including the two aforementioned functions as well as emphasising a point and expressing humours, they did use this strategy to compensate for the vocabulary deficits that was linked less to a sociocultural aspect of strategy use.

Mime: This is the only paralinguistic strategy investigated in video-based SCMC. Most learners of English and learners of Chinese claimed the use of mime could improve comprehensibility of input and output. Nevertheless, when all learners of Chinese used this strategy effectively to help their verbal expressions, only one learner of English used this strategy. One learner of English reported that she did not attempt to use mime in video-based SCMC as her webcams could only catch her facial expression, but it was too close to catch her gestures. Her reflection is consonant with several studies as reviewed in Gullberg's (2006) that the absence of visual access between interlocutors cause a general reduce in the frequency of gesture use, but it does explain the difference between learners of English and learners of Chinese, although the difference was not statistically significant. One

possible explanation for the infrequent use by Chinese learners of English might be as suggested by Chen (1990) that Chinese culture considers the use of many gestures impolite. On the other hand, the frequent use of mime by English learners of Chinese might just reflect they were at lower level of target language proficiency as most examples in this study were to help convey the meaning of one particular lexical item.

Use of Text/Symbols to Display the Effect of Intonation, Punctuation, Substitution, and Use of Emoticons: These four strategies were mainly to compensate for the sensory restrictions in text-based SCMC. The use of these paralinguistic strategies seemed related to learners' personal preferences or habits. The same types of punctuation and emoticons were recurring in individual learner's first language as well as the target language discourse, which might indicate their preference for these particular types of punctuation and emoticons and also suggested learners might carry over their first language habits to the target language discourse. Most examples of punctuation and emoticon use in this study were likely to be comprehensible to their interlocutors except for one ideographic emoticon “囧”. As it is originally a Chinese character, learners of Chinese might not be able to get it if they never saw it before. They were probably more confused if they looked up the dictionary and found the original meaning of this word, which is not connected to the meaning of this emoticons.

The strategies of use text/symbols to display the effect of intonation appear to be language specific. Multiplying letters for extended sounds and using substitutions such as “u” for “you” were not allowed in Chinese conversation. Therefore, it is not surprise that learners of Chinese did not use these two strategies in Chinese conversation. It is interesting that learners of English never multiplied

letters for extended sounds in English conversation either. Instead, they used tilde ‘~’ for extended sounds in English conversation, which indicated that learners carried their habits in the first language conversation to the target language conversation. Indeed, as learners of English preferred using tilde ‘~’ for extended sounds in English conversation and learners of Chinese could not multiply letters for extended sounds in Chinese conversation, all examples of using text/symbols to display the effects of intonation in both English and Chinese text-based SCMC were the use of tilde ‘~’ for extended sounds.

6.3.2 Discussion of CS Use by Learners of English and Learners of Chinese in SCMC

As presented above, the differences between learners of English and learners of Chinese appeared to be largely affected by the different proficiency levels. Learners of English who had higher target language proficiency tended to use some discourse strategies more frequently as they probably devoted more attention to the overall discourse and more concern about the conversational flow. They used a great number of input elicitation strategies as well as inferential strategies to promote the flow. They also used verbal strategy markers and time gaining strategies frequently to prevent the conversational breakdown. On the other hand, learners of Chinese who had lower target language proficiency tended to use more CSs to compensate for their inadequate language abilities. They frequently used interactional modification strategies, compensatory strategies and code-switching to help their target language comprehension and expressions. The high frequent use of meta-talk and own accuracy check might also indicate they allotted most of their attention to lexical items.

The frequent use of focus-on-form strategies by learners of Chinese seemed to be partially affected by their awareness of being in tandem learning setting. Learners of Chinese reported that they did not mind and indeed expected their interlocutors corrected their mistakes as they were in tandem learning interactions. It is noted that learners of English also praised the corrections their interlocutors provided, but at the same time they slightly embarrassed by their making many mistakes. Therefore, they did not always indicate their language problems in conversation. The overall result is consistent with Rost and Ross's (1991) suggestion that the selection of CSs was mostly likely to be affected by both cognitive constraints (proficiency position) and social constraints (context position). Learners' selections of CSs were closely connected to their perceptions of the acceptability and appropriateness to the interaction.

The results in this study also corroborate Tarone's (1980) claim that the preferences for particular CSs may be related to specific languages or cultures. The four paralinguistic strategies used to compensate for the sensory restrictions in text-based SCMC are connected to the conversational language as well as the learners' first language. Learners tended to carry over their first language habits to the target language text-based interaction, but the different writing systems between English and Chinese might on occasion restrict the transferring. Apart from these four language specific strategies, learners of English and learners of Chinese also showed their preferences for particular CSs, which seemed to be affected by their perceptions of the cultural norm in the target language and also their native cultural background. Although both learners of English and learners of Chinese used social formula frequently to sustain a social collaborative relationship, the degree of politeness seemed to be affected by their perceptions of target cultural norms as well

as their personal concerns (e.g. the appropriateness to an informal tandem learning interaction).

Learners of English and learners of Chinese in this study had preferences for different types of interactional strategies that seemed to be partially affected by their cultural backgrounds apart from the different levels of language proficiency that has been discussed earlier. Learners of English tended to use more interactional strategies to sustain and promote the discourse, but not so many interactional modification strategies. The preference might indicate their priority was to build a relationship and keep a positive face due to the influence of their native culture, which is Chinese culture. Their infrequent use of request for clarification and help might be to avoid showing their problems. The traditional eastern learning style is receiving lectures. Although an interactive teaching and learning style has become more and more popular in language classrooms, most Taiwanese learners seemed to be less active in negotiated interaction than learners from western cultures. In contrast, learners of Chinese tended to actively participate in the interaction as they often used interactional modification strategies to require a response from their interlocutors. They also used the strategy of framing frequently to control the pace of the conversation. Their preferences for these interactional strategies might indicate their concern about information exchange and the task completion. Although the in-depth investigation of the cultural differences is beyond the scope of this study, the finding certainly corroborates Tarone's (1980) claim about the effect of the cultural differences on the preferences for particular CSs and it seems to also corroborate Holmes's (2005, 2006) suggestion about the need for ethnic Chinese learners to acquire some particular CSs in order to adapt themselves to the inquiry-based dialogic western communication and learning style (cf. Cheng, 2000).

6.4 Summary

This chapter has presented and discussed the comparative results of the use of CSs between text-based and video-based SCMC as well as between learners of English and learners of Chinese. Learners tended to use sociocultural strategies frequently to sustain positive social interaction with their cultural different peers in the four SCMC settings. They also tended to use various CSs or other resources to help their expression instead of altering their intended messages. Therefore, reduction strategies were used rarely in the four SCMC settings. Except for these similarities, most CSs were used differently in the two modes of SCMC from both quantitative and qualitative perspectives. The differences between the two modes of SCMC in use of many CSs attained significance at the 0.05 level. Extended processing time and an easy access to consult other resources in text-based SCMC appeared to reduce learners' use of CSs to solve language problems of comprehension and expression. Therefore, the strategy of request for clarification was often used to get situational meaning or to react promptly rather than to get explanations for unfamiliar lexical terms in text-based SCMC. In contrast, learners used various CSs more frequently to solve the language problems instead of taking time out from the interaction in video-based SCMC. Some CSs such as input elicitation strategies and time-gaining strategies were promoted in a video-based SCMC environment where learners were compelled to be fully engaged in conversation. It is worth noting that despite the frequent use of focus-on-form strategies in video-based SCMC, the written nature of text-based SCMC seemed more effective to enhance their noticing according to the investigation from a qualitative perspective.

The effect of the conversational language on CS use did not appear to be as salient as the effect of the medium. Besides, some factors appeared to affect the use

of CSs by learners of English and learners of Chinese apart from the conversational language. The different levels of language proficiency might affect the selection of CSs. The social constraints and learners' native cultural background might also affect learners' preferences for particular CSs.

The differences between text-based and video-based SCMC in CS use seemed to indicate different learning conditions provided by the two modes of SCMC. The differences between learners of English and learners of Chinese also raise some implications for learning English/Chinese language teaching. The following chapter will discuss the implications as well as limitations of this study before laying out the conclusion.

CHAPTER SEVEN: CONCLUSION

7.1 Introduction

The purpose of this research was to investigate what communication strategies were used by learners of English and learners of Chinese in both text-based and video-based SCMC environments where they were interacting with each other as tandem learning dyads. Three research questions generated from this research purpose were posed in chapter one and the results in response to these three research questions were presented and discussed in chapter five and chapter six. Apart from the findings in the fieldwork, this study also clarified and classified a wide range of CSs and addressed the different turn taking systems in text-based and video-based SCMC. As the final stage of the research, this chapter will first summarize the research with the emphasis on the contributions to the analytical method as well as the findings in the fieldwork, and then discuss the implications and limitations of the research. Finally, the conclusion of this research will be laid out.

7.2 Summary of the Research

In chapter one, the two vital areas of this research, CSs and CMC, were outlined to clarify the context of the research and the relation to the target language use and acquisition. A successful conversation in SCMC is one practical goal for target language learning and teaching due to the widespread use of SCMC inside and outside the learning setting. As the use of CSs is one effective approach to this goal, the significance of this research lies on the clarification of what CSs are available for learners to use in SCMC and how these CSs can facilitate the conversation in SCMC. Despite some minor differences, various SCMC platforms generally fall into either

text-based or video-based mode. Therefore, the clarifications of various CSs and the findings of CS use with the distinction between text-based and video-based SCMC in this research can be generalized to various SCMC platforms. In addition, the research also investigated the use of CSs by learners of English and learners of Chinese in the target language conversation to verify the culturally and language specific aspects of CS use and also to specifically contribute to teaching and learning the languages of English and Chinese.

In chapter two, theories of interaction were reviewed to ground this research on a theoretical basis in the field of SLA. When conversation is also the means by which target language acquisition takes places (Gass, 2003), negotiated interaction with a native speaker appears to create a positive condition for acquisition (Long, 1996). From this aspect, learners are most likely to benefit from having socio-personal SCMC interactions with their tandem learning peers to extend their learning outside the classroom and that is particularly beneficial for foreign language learners to develop sociocultural competence (Darhower, 2002; Lee, 2002a; Watson-Gegeo & Nielsen, 2003). In the second half of the chapter two, a group of studies in CSs were reviewed to help clarify and classify CS coding in this study. From an interactive perspective, CSs are defined as mutual attempts to attain agreed meaning between interlocutors (Tarone, 1980). That is, apart from the two divergent approaches to solve language problems of expressions, namely, compensatory strategies and reduction strategies, interactional strategies used to repair and manage discourse are also one type of CSs to facilitate mutual comprehension. Indeed, the three categories are all included in the CS coding categories in this study, but compensatory strategies are limited to strategies used to compensate for the restricted target language resources through manipulating available language knowledge in order to avoid the overlaps with interactional strategies or

paralinguistic strategies. Therefore, the scope of compensatory strategies in this study is narrower than the taxonomies of Færch and Kasper (1983b) and Nijmegen (Kellerman, 1991).

In chapter three, the research method used to carry out this research was discussed. The performance data collected from the real interactions in the four SCMC settings were investigated along with the supportive information collected from questionnaires and stimulated reflections to have the rich texture of the analysis. To clarify what communication strategies are available for learners to use in both text-based and video-based SCMC environments, the coding categories in this study extended the scope and combined a wide range of CSs used in either problem or problem-free discourse from various SLA literatures. Despite the extended scope of the coding, some CSs with similar functions are carefully integrated to prevent profligate expansions. Moreover, these CSs were further sorted into categories in terms of their functions to reflect different dimensions of CS use. Focus-on-form strategies and sociocultural strategies were added to the coding categories along with the three widely recognized categories in exiting taxonomies, namely, interactional strategies, compensatory strategies, and reduction strategies. Focus-on-form strategies are mainly used to ensure the accuracy of the target language use and the use of these strategies often indicates the noticing of target-like language forms. As noticing is essential for target language acquisition (Schmidt, 1990), the use of focus-on-form strategies may imply the possibility of acquiring these target-like language forms. Sociocultural strategies are one category and should not be overlooked in CS coding when sociocultural competence has been considered as one component of communicative competence (Canale & Swain, 1980; Canale, 1983). Finally, paralinguistic strategies are separated from the aforementioned categories as most of them are used specifically in text-based interaction and functionally different

from the paralinguistic strategy (i.e. mime) recognized in the previous studies.

In chapter four, all CSs contained in the coding categories were carefully clarified and examined to ensure the applicability in SCMC through the data collected in the pilot study. While the coding of each CS use in this study indeed took all the form, the function, and the pragmatic intent of learners into consideration, this chapter also gave a transparent account of the coding process. The coding categories in this study are not without problems, although many problems have been carefully addressed. Nevertheless, the clarification of individual CSs through the literature as well as the authentic examples from the pilot study and the classification suggested with reasonable distinctions and specific considerations have paved a way for further studies of CS use in SCMC. Besides, learners may benefit from CS training that raises their awareness of what strategies can be used and how these strategies generally function in interaction, and the categories indicating the main function of individual CSs may help in this regard as learners perhaps do not need to be capable of identifying all the individual CSs in the coding categories.

Apart from clarification and classification of CSs, chapter four also addressed the different turn taking structure in text-based and video-based SCMC to ensure the comparability and to describe a fair scheme to quantify the use of CSs in various turn units. The identification of who holds the 'floor' is always the key to define a shift of turns. Splitting turns (sending out one message in separate sections) is often used in text-based SCMC to hold the 'floor'. The best way to cope with a single strategy contained in split turns (where the message has been interrupted by the interlocutor and split into two turns) was to view this as one occurrence of strategy use. In the same vein, the use of a first language term to convey CSs such as requests for help was not viewed as the use of code-switching in this study to avoid double coding. The aim was to prevent over coding and ensure the fairness of a

quantitative comparison of CS use between text-based and video-based SCMC and between learners of English and learners of Chinese. Although studies (Lee, 2001, 2002b; Smith, 2003b; Kost, 2008) have investigated the frequency of use of CSs in text-based SCMC, these studies did not really give an explicit account of the process of coding and analysis. As the use of CSs in SCMC is a relatively new area in SLA research and more studies are still in need, the clarification of quantifying CS use may be useful for future studies.

As this study intended to provide a complete picture of the use of CSs in the four SCMC settings instead of focusing on the most frequently used CSs, chapter five elaborated how individual CSs were used and then reacted along with the descriptive statistics of use of individual CSs and the distribution patterns of the six types of CSs. In addition, whereas the use of CSs involve both interpersonal and intrapersonal activities, the after-task questionnaire and stimulated reflections were used to provide insights into learners' perceptions of CS use and to validate the analysis of some particular CSs used in interaction. Based on the results presented and discussed in chapter five, chapter six further compared the use of CSs between text-based and video-based SCMC and between learners of English and learners of Chinese systematically and comprehensively.

Learners in this study tended to use CSs to solve their language problems more (statistically significantly so) in video-based SCMC than in text-based SCMC. Based on their reflections, consulting other resources frequently in text-based SCMC was reasonably suspected of causing the reduced use of this strategy as well as some other CSs for solving language problems of comprehension and expression. Although learners were requested to practise the target language without consulting a dictionary due to this anticipated effect, this was not rigidly enforced in this study to maintain the nature of informal socio-personal interaction. In addition to the use of

other resources, the extended processing time and the written discourse in text-based SCMC perhaps also improved learners' comprehension and expression and consequently reduced the need for CSs to solve language problems. When learners spent time to reflect on form beyond meaning comprehension in text-based SCMC, they gained confidence in their performance. The confidence might encourage more language production, this was indeed one advantage of text-based SCMC found in previous studies (e.g. Chun, 1994; Kern, 1995; Warschauer, 1996); nevertheless, as this study intended to make a comparison between the two modes of SCMC and only looked at the performance in thirty minutes of time, learners did not really produce much output in text-based SCMC when they took time to plan and edit their messages. Besides, the inadequate keyboard skills (e.g. typing speed, particularly in Chinese) as well as literacy abilities also restricted the production of some learners in text-based SCMC. In contrast, learners relied more on CSs to solve their language problems in video-based SCMC as they did not have time to consult other resources and the nature of the face-to-face interaction probably also inhibited this. Although the frequent use of requests for clarification in text-based SCMC was consistent with Lee's (2001, 2002b) and Kost's (2008) studies, this strategy was indeed used more frequently in video-based SCMC. Learners also used mime to help their expressions and benefited from paralinguistic aids such as intonation and facial expressions for meaning comprehension, although the level of comprehension was probably insufficient to facilitate acquisition. Apart from strategies used to solve language problems, some discourse strategies such as input elicitation strategies and time gaining strategies were also promoted by the video-based SCMC environment. Overall, when video-based SCMC compelled learners to practically use the target language with all the learned knowledge, it might render more immersive learning.

The differences between two groups of learners in CS use appeared to be

less salient than the differences between the two modes of SCMC. Learners of English and learners of Chinese have different preferences for particular CSs, but the differences seemed to be affected by the target language to only a small degree. Nevertheless, the paralinguistic strategies used specifically in text-based SCMC to compensate for the sensory and medium restrictions were indeed partially affected by the target language as well as learners' habits in their target language interaction. Except for these paralinguistic strategies, the CS preferences were more likely to be affected by the different language proficiencies and cultural differences between learners of English and learners of Chinese.

7.3 Implications

The investigation of learners' use of CSs along with their retrospective reports in this study indicate the need for CS training when most learners were not fully aware of what CSs could be used in SCMC. They were particularly unaware of strategies used to facilitate interaction to support problem-free discourse. Although they all had a rough idea of how to cope with language problems, the strategy of mime that all of them claimed effective to help their expressions could not be applied in text-based SCMC. As the knowledge of CSs can probably help learners look after themselves in conversation apart from their developing language competence (Dörnyei, 1995; Rost & Ross, 1991), CS training is recommended. When the training is to raise learners' awareness of various CSs along with their communicative potential, a wide range of CSs laid out in this study that have been clarified by previous literature as well as the performance data in this study and classified into categories according to the functions for pedagogical use in this regard. Most strategies in this study were identified from studies based on traditional face to face communication and the results in this study showed video-based SCMC is very

similar to face to face communication in terms of CS use. Indeed, almost all CSs can be used in both text-based and video-based SCMC apart from some paralinguistic strategies; nevertheless, some CSs tend to be conveyed differently in the two modes of SCMC and some kinds of usage are promoted in one particular mode of SCMC. From this aspect, CS training in general may prepare learners effectively communicating in various environments, but modeling the different usage in the two modes of SCMC is recommended to enhance their performance in SCMC. It is worth noting that learners who gave stimulated reflections often noticed some communicative problems they wanted to improve, which they were unable to attend to when engaging in interaction. When interactions in both modes of SCMC can easily be recorded, reflecting their own interaction may be a way to help them develop repertoire of communication strategies.

In addition to the knowledge of what CSs can be used, learners also need to know the possible effects of these CSs on the interaction to make the best use of them. The frequent use of strategies to ensure the comprehension or accuracy of some particular terms by learners of Chinese in video-based SCMC seemed to cause their interlocutors to limit the scope and number of messages given. While focus-on-form strategies might promote the acquisition of target-like language forms, these strategies might not always promote the conversational flow. Indeed, the use of such strategies is usually discouraged in conversation outside the learning setting (Lafford, 2004). On the other hand, the occasional use of feigning understanding might facilitate the interaction, but has less potential for acquisition. Inferential strategies were also effective to expand the conversation, although the use of such a strategy generally required a good comprehension and expression ability. Apart from the development of language ability, learners might probably benefit from being taught and encouraged to use more inferential strategies and other strategies used to

promote discourse-level comprehension and conversational flow. When an effective interaction and learning of the target language through conversational interaction are both important objectives for learners, CS training may offer another level of help by showing how various CSs can facilitate target language acquisition in the two modes of SCMC. Although strategies such as interactional modification strategies and focus-on-form strategies used in a text-based SCMC environment have been addressed in previous studies (e.g. Kitade, 2000; Lai & Zhao, 2006; Lee, 2001, 2002b, 2008), additional research in the relations of different types of CSs used in both modes of SCMC to language acquisition is needed.

As both text-based and video-based SCMC has been increasingly used in language learning and teaching, language educators and course developers may need to know the learning conditions provided by these two modes of SCMC in order to effectively integrate the media into their language courses. Both modes of SCMC have potentials for target language acquisition in terms of the affordance of interactional modifications, but the frequent use of other resources seemed to distract learners from engaging in the social interaction in text-based SCMC. When the use of a simultaneous dictionary was difficult to restrict in text-based SCMC and learners tended to edit their unsent messages to ensure the comprehensibility and accuracy, a task designed to utilize this feature to promote accuracy development might be an alternative direction to pursue. Except for a few participants who were aware of the tandem learning relationship, most participants tended to accept each other's language mistakes in both modes of SCMC unless the meaning could not be easily comprehended. Although the meaning-orientated interaction may generally promote fluency rather than accuracy, text-based SCMC appeared to create a better condition to promote accuracy development than video-based SCMC. The extended processing time and the written discourse in text-based SCMC allowed them to edit

the unsent messages and might thereby attend to target language forms beyond the concern of basic comprehensibility. The written text appeared to enhance learners' noticing of some types of the corrections their interlocutors provided (e.g. "sheeps" to "sheep") and retained the noticed terms for them to review or employ later. From this aspect, learners may benefit from being explicitly encouraged to develop accuracy through attending the language forms in text-based SCMC. To enhance the benefit of being in a tandem learning relationship, their interlocutors should also be encouraged to help learners in this regard. In contrast to text-based SCMC, the faster pace and more intensive interaction in video-based SCMC appeared to compel learners to rely more on interactional strategies for compressibility of input and output. From this aspect, video-based SCMC seems effective for fluency development. Moreover, video-based SCMC may also be superior to text-based SCMC in terms of pronunciation improvement, but native speakers or at least more proficient peers are required. Learners of Chinese often repeated the correct forms they noticed in their interlocutor's message, which was viewed as one type of meta-talk in this study. The oral repetition could probably benefit for their pronunciation as learners often received help from their interlocutors to pronounce more accurately when their repetitions sounded funny. There appear to be limited studies in video-based SCMC to date. Although this study has speculated about the different conditions for target language acquisition provided by text-based and video-based SCMC through the investigation of CS use, more specific studies to clarify the strengths and drawbacks of using these two modes of SCMC for language teaching and learning are still in need.

Learners of English and learners of Chinese tended to have their own preferences for CSs, which seemed to be affected partially by their cultural backgrounds. Learners of English who are native speakers of Chinese tended to

sustain the interaction without bringing out their language problems. As interactional modifications can promote target language acquisition, ethnic Chinese learners may need to be encouraged to use more interactional modification strategies. On the other hand, when the preferences might reflect the appropriate communicative style in one particular culture, learners might need to raise their awareness of cultural differences to avoid any offence during intercultural communication. Moreover, learners in this study relied on the use of polite social formulas heavily as they were not fully aware of the norm of the target culture and may have been afraid of being cultural inappropriate. Despite the effect of social formula, more studies are recommended to investigate the sociocultural aspect of language use in order to know if there are other CSs available for learners to compensate for inadequate sociocultural competence.

When learners of English and learners of Chinese interacted with each other as tandem learning dyads, some advantages of tandem learning interaction were suggested in this study. The social-personal interaction with native speakers could facilitate the development of sociocultural and intercultural competences by providing the opportunity for learners to observe and practice culturally appropriate language use in a social context. In addition, learners felt supported and secure when attending to the language forms in the reciprocal interaction, which they might not feel otherwise when interacting with native speakers outside the learning setting. The equal authority also encouraged learners to develop the talk with native speakers in the target language and the experience might further encourage the participation in interactions with various interlocutors. It is worth noting that learners in this study who did not study abroad particularly praised the opportunity to interact with native speakers in tandem learning interaction when they did not really have any other access. They also felt insecure and uncomfortable about randomly interacting with a

native speaker who was a total stranger on line. As tandem learning interaction in SCMC appears to be an economic and convenient way to communicate with a native speaker, foreign language learning programs may therefore support their students in this regard by arranging and regulating the interaction to maximize the learning effect and also to ensure the safety inside and outside the cyber-world.

The technology of communication media has kept developing and impacting on people's life whilst this study was conducted. The rapidly increased use of smart phones is one example. Indeed, Skype and similar applications for smart phones have offered a more flexible access to have synchronous text-based and video-based interaction than through a computer (SCMC) in terms of location years ago. There may be some minor differences involved. For example, browsing other resources online during synchronous text-based and video-based interaction via a smart phone may not as convenient as via a computer. Nevertheless, the results of the differences between synchronous text-based and video-based SCMC on CS use in this study can probably be generalized to synchronous text-based and video-based interaction through a smart phone. In addition, the flexibility in terms of location may be an advantage of having tandem learning interaction through a smart phone. Instead of staying in their rooms and communicating via a computer, tandem learning peers who are in different locations may virtually 'hang out together' through interaction via a smart phone. The phenomenon that some people, particularly the young, are busy sending pictures and text to others when hanging out with their friends raises a lot of criticism in Taiwan recently. It appears to be a social problem that people do not talk to friends next to them, but text other friends who were not there; nevertheless, if it is young learners' preference, it may be a way to promote tandem learning interaction. Some participants in this study reported they did not really know what to talk about in conversation with their tandem learning

peers without the help of suggested topics. While the suggested topics were meant to encourage participants to share and exchange information relevant to their life experiences, an authentic live report from one interlocutor may provoke more interaction. This suggestion may be some way from the specific implications of this research, but it may be a practical direction to learn the target language with the help of new technologies.

7.4 Limitations

The limited generalizability of the findings is an inherent restriction of this study. Although a number of sets of interaction data and reflections were analysed, the results may be particular to the learners in this set of tandem learning interactions. To form well-matched tandem learning dyads and also to make a relatively fair comparison between learners of English and learners of Chinese on CS use, English majors who are native speakers of Chinese and Chinese majors who are native speakers of English were the two target groups to recruit from universities in Taiwan and in UK to ensure the equality of social status and motivation. Nevertheless, it was a real challenge to recruit learners of Chinese due to the relatively small population of Chinese majors in UK universities and also the exclusion of novice learners whose literacy ability was inadequate to participate in text-based SCMC. Despite the challenge, learning Chinese is getting more and more popular and the results pertaining to learners of Chinese is one important part of this study. Besides, with the participation of both learners of English and learners of Chinese, the study also verified the applicability of international tandem learning in SCMC and speculated about some benefits of this type of SCMC.

Another limitation is the different target language proficiencies among participants, which was indeed derived from the difficulty of recruitment. Although

the different proficiency levels were carefully taken into consideration when comparing the use of CSs by learners of English and learners of Chinese due to the anticipated effects (e.g. Rost & Ross, 1991), two groups of learners with the same level of language proficiency could probably strengthen the speculation about the effect of cultural or linguistic differences on CS use. The cooperation between an English course and a Chinese course may be an option for replicated research, although there will be new issues that would need to be addressed. For example, it is important to ensure the performance will not be biased by any kinds of rewards or judgement if the interaction is part of a course requirement.

The third limitation is that only a subset of participants gave stimulated reflections to validate the coding of some particular CSs. Although more insight into learners' cognitive processes of CS use could be gained, it was practically difficult to have all participants reflect on their interactions comprehensively. When tandem learning partners were based in different countries during the participation, it was difficult to reach both of them in person shortly after the last online interaction was completed. As a result, the stimulated reflections were conducted through Skype. There were several challenges when having stimulated reflection through Skype such as very limited control the researcher had on the review pace. Although only two dyads gave reflections online, the study has demonstrated the possibility to have stimulated reflections online with some solutions to some practical difficulties.

7.5 Conclusion

This study has extended the investigation of CS use in both text-based and video-based SCMC. This is an important yet underdeveloped area in SLA, and the study has paved the way for similar studies by clarifying and classifying a wide range of CSs with a specific consideration of the two modes of SCMC. The study

found that almost all CSs apart from paralinguistic strategies can be used in both modes of SCMC, although some CSs are conveyed differently. In addition, the differences between the two modes of SCMC in the frequency and types of use of CSs might suggest the different learning conditions provided in text-based and video-based SCMC environments. This study also investigated the use of CSs by both learners of English and learners of Chinese in SCMC. Although the language and cultural effects on CS use seemed less salient than the media effects, the cultural differences between learners of English and learners of Chinese appeared to affect their preferences for CSs. This finding suggested the need to raise learners' awareness of CS use pertaining to the target language use and acquisition as well as the awareness of cultural differences to facilitate intercultural communication. As learners of English and learners of Chinese were in tandem learning dyads, some advantages of tandem learning were suggested in this study. Nevertheless, as tandem learning interaction appears to be different from interaction between native speakers and non-native speakers outside the learning setting, replicated research without a tandem-learning design is suggested to find out if there are any differences with different types of interlocutors.

APPENDICES

Appendix A: Paired Interaction Guidance 互動交流指南

Every participant should have access to an account with MSN Messenger and Skype on their own computer. MSN messenger has a build-in function of recording textual interaction, and the software to record video conferencing in Skype will be provided by the researcher.

1. After submitting your consent form and background information questionnaire, you will receive your partner's contact information. Each pair (one Mandarin learner and one English learner) should decide your own meeting dates and time slots, but there should be an interval of around a week between two meetings and all activities are expected to be completed within two months of starting the project.
2. There should be five online 'meetings'. The first one is a trial interaction and is flexible in terms of what happens compared with the other four. During this interaction, participants are free to use Mandarin and English interchangeably without a time limitation or a specific topic. It's a chance for you to get to know your partner better and be familiar with the procedure of using the software. The only requirement is that participants should try out both text based (MSN Messenger) and video based (Skype) interaction and send back these records to the researcher.
3. Subsequently, you should **use one language mainly** without the aid of a dictionary or translator for each interaction. This design should provide language learners an opportunity and an environment to communicate with native speakers in real time. You will take turns to be a tutee (in the language you are learning) or a tutor (in your first language) in four forms of interaction: synchronous text-based chat (MSN messenger) in English 、synchronous text-based chat (MSN messenger) in Mandarin 、synchronous video-conferencing (Skype) in English 、synchronous video-conferencing (Skype) in Mandarin. The order of these four activities will be vary from pair to pair. Each pair will be given a pattern to follow so that the research is balanced across the groups.

4. In each chat or video interaction, a suggested topic with a set of relevant questions will be provided for you to discuss. These four topics will be about your daily life or cultural background. You should be able to share your knowledge and views with your partner from different perspectives since you are from different cultural backgrounds. **Each interaction should last around 30 minutes.** Participants are allowed to expand the topic if they go through all the questions within 30 minutes.

每位參與者皆需自備 MSN Messenger 與 Skype 的使用帳號及其使用管道。MSN Messenger 具內建文字記錄功能，而 Skype 影音互動的記錄軟體將由研究者提供。

1. 在提交同意書及背景資料問卷後，你將收到你小組同伴的連絡資料。每一小組(由一位中文學習者及一位英文學習者組成)將可自行決定每次互動交流的時間，但兩次交流需間隔約一週且所有的交流活動都需於計劃開始後的兩個月內完成。
2. 本計劃將有五次線上交流活動。第一次為體驗性質，因而較其他四次的交流活動具有彈性。在此次交流中，你可在沒有時間限制及特定主題的情況下，中英雙語並用來與你的同伴溝通。藉此機會，你將對同伴有進一步的認識，並熟悉軟體操作方式。此次交流的惟一要求為，需體驗 MSN Messenger 與 Skype 兩種媒介進行交流，並將其記錄交給研究者。
3. 隨後，你將在不借助字典或翻譯器的情況下，**以單一語言來進行每次的交流。**此設計期能提供語言學習者與母語人士一個同步交流的環境。每小組將進行四種不同型式的交流，分別為透過 MSN Messenger 進行英文同步文字訊息互動、透過 MSN Messenger 進行中文同步文字訊息互動、透過 Skype 進行英文同步影音互動、透過 Skype 進行中文同步影音互動。你將於上述四種交流中，輪流扮演指導者及被指導者的角色。而四種交流的進行順序，則因各小組互有不同，故將另行通知。
4. 在每次的文字或影音交流活動中，都將有一個主題及其相關問題供你與同伴互動討論。四個主題皆與個人的日常生活經驗或文化背景相關。因文化差異等因素，你與同伴應有互相交流學習之處。**每次交流活動時間約為半小時。**若你在半小時內已完成所有問題，則可依主題作更深入的討論。











Appendix B: Questionnaire 1



Part 1: Personal Information

Surname:	Given Name:
Age:	Gender:
University:	Major (& in what year):
Why do you want to study Mandarin? 	
For how long have you studied Mandarin? 	
What do you expect or hope for from the upcoming opportunity of communicating with your Taiwanese peer? 	

Part 2: Personal Experience

(Copy and paste “ ✓ “ to the right box)		Yes	No
1.	Do you have any chance to use Mandarin outside the language classroom?		
	If yes, please describe how. 		
2.	Are you confident of communicating with others in Mandarin?		
	Why or why not? 		
3.	Have you ever communicated with a native Mandarin speaker in Mandarin?		
	If yes, in what ways (in person, over phone, text-based chat, or video-conferencing)? 		
	In your opinion, which do you (or would you) prefer? Why? 		
4.	Do you feel anxious or nervous when communicating with a native Mandarin speaker in Mandarin?		
	What causes this? 		
	If yes, what might you do to lessen this? 		

5.	Are you worried about making mistakes when communicating with a native speaker of Mandarin in Mandarin?		
	Why or why not? 		
6.	Do you mind if a native speaker of Mandarin corrects you?		
	Why or why not? 		
7.	Are you experienced in using a computer?		
	What do you generally use it for? 		
8.	Have you ever communicated with others in synchronous text-based chat such as MSN Messenger? (If no, please jump to question 12.)		
	If yes, how often (Daily / Several times a week / Once in a while)? 		
	Could you talk about any difficulties or interesting experiences when chatting? 		
9.	Are you familiar with things like emoticons (such as smiley faces)?		
	How often do you use them (Almost always / Often / Occasionally)? 		
10.	Have you ever communicated with nonnative speakers of English or people from other cultures using synchronous text-based chat?		
	How do you feel about this kind of experience? 		
11.	Do you feel comfortable using synchronous text-based chat to communicate?		
	Why or why not? 		
12.	Have you communicated with others using synchronous video-conferencing such as Skype? (If no, please jump to part 3.)		
	If yes, how often (Daily / Several times a week / Once in a while)? 		
	Could you talk about any difficulties or interesting experiences in it? 		
14.	Have you ever communicated with nonnative speakers of English or people from other cultures using synchronous video-conferencing?		

	And how do you feel about this kind of experience? 		
15	Do you feel comfortable using synchronous video-conferencing to communicate?		
	Why or why not? 		

Part 3: Personal Opinion

1. What might you do if you can't think of the right word when communicating with a native Mandarin speaker in Mandarin?



2. What might you do if you don't understand what a native Mandarin speaker said in Mandarin?






3. What may you do to keep a conversation going when communicating with a native Mandarin speaker in Mandarin?















問卷 一

第一部分：個人資料

姓名：	
年齡：	性別：
目前就讀_____大學_____系_____年級。	
請問你學習英文的原因為何？ 	
請問你學英文多久了？ 	
請問你對即將開始的與英國學生交流的機會有什麼期望？ 	

第二部分：個人經驗

(複製 “ ✓ ” 再貼於右方合適的格子中)		是	否
1.	請問你是否有任何課堂外使用英文的機會？		
	若有，請簡述其經驗。 		

2.	請問你是否有信心以英文與他人交談?		
	其原因為何? 		
3.	請問你是否曾有與英文母語人士以英文交談的經驗?		
	若有，請問是透過何種方式進行(面對面，電話，文字訊息，或影音傳輸)? 		
	依你個人的看法，那一種方式讓你覺得最不緊張? 為什麼? 		
4.	請問你與英文母語人士以英文交談時，是否感到緊張?		
	其原因為何? 		
	如果你會緊張，你將如何降低你的緊張感? 		
5.	請問你與英文母語人士以英文交談時，是否擔心自己會犯錯?		
	其原因為何? 		
6.	請問你是否在意此英文母語人士在對話中更正你的錯誤?		
	為什麼? 		
7.	請問你是否熟悉電腦的操作?		
	你通常使用電腦來從事何種活動? 		
8.	請問你是否曾以同步文字訊息方式如 MSN Messenger 與他人交談? (如果未有此類經驗，請直接跳至 12 題.)		
	如果有，其使用頻率為何 (每天 / 一星期數次 / 偶而一次)? 		
	請述說任何你以文字訊息交談時，所遭遇的困難或有趣的經驗。 		
9.	請問你是否熟悉「表情符號」等功能?		
	請問你使用這些功能的頻率? (頻繁 / 經常 / 偶爾)? 		
10	請問你是否曾經與外語人士或來自不同文化的人，透過同步文字訊息(MSN Messenger)交談的經驗?		

	你對此類經驗的感覺為何? ✍		
11	請問當你以同步文字訊息(MSN Messenger)交談時，是否感到自在?		
	其原因為何? ✍		
12	請問你是否曾以同步影音傳輸方式如 Skype 與他人交談? (如果未有此類經驗，請直接跳至第三部份.)		
	如果有，其使用頻率為何 (每天 / 一星期數次 / 偶而一次)? ✍		
	請述說任何你以同步影音傳輸方式交談時，所遭遇的困難或有趣的經驗。 ✍		
14	請問你是否曾經與外語人士或來自不同文化的人，透過同步影音傳輸方式(Skype)交談的經驗?		
	你對此類經驗的感覺為何? ✍		
15	請問當你以同步影音傳輸方式(Skype)交談時，是否感到自在?		
	其原因為何? ✍		

第三部分：個人意見

1. 請問當你與英文母語人士以英文交談時，你將如何克服字彙量不足等困難?

✍

2. 請問當你聽不懂英文母語人士所說的話時，你將如何因應?

✍

3. 請問你與英文母語人士以英文交談時，如何保持對話的持續進行?

✍

Appendix C: Questionnaire 2

Name: _____

Please feel free to answer in either English or Mandarin, whichever you feel comfortable to express your thoughts.



Part 1:







Please read the following statements and then choose a response from 1 to 5 to fill in the box after each statement.

1. Never or almost never true of me → 2. Generally not true of me → 3. Somewhat true of me → 4. Generally true of me → 5. Always or almost always true of me

As a language learner, I.....when communicating in the learned language	1 → 5
1. am willing to take risks even though I may make mistakes	
2. pay attention to keep the conversation flowing	
3. change ways of saying things to get my message across	
4. pay attention to the social/cultural aspect of language use	
5. pay attention to the language form such as grammar or word order	
6. use nonverbal techniques to help	
7. give up when I feel I can't do it	
8. think getting the message across is the most important part	
9. take my time to express what I want to say	
10. pretend I understand what my peer said to avoid interrupting the flow of conversation	

Part 2:

Please answer the following questions based on your experience in pair interactions. (Copy and paste “ ✓ “ to the right box)		Yes	No
1.	Did you chat with your peer in MSN or Skype other than the five times of required?		
	If yes, how many times more and what language did you two use when chatting? 		
2.	Did you talk about any of these suggested topics with others in your learned language prior to this participation?		
	If yes, which topic(s) did you talk before and did you think the prior experience help you express yourself better? (Suggested topics in this study: Festivals, Travel, Food, and Leisure activities.) 		

3.	Did you prepare how to answer these topic-based questions in your learned language in advance?		
4.	Did you use resources such as Google or simultaneous dictionary when chatting with your peer?		
	If yes, you use in MSN, Skype, or both?		
5.	Did you review the content of records before sending them back to me?		
	If yes, why did you do so and what did you think/feel when you review the content?		
			
6.	Did you feel any differences in MSN interaction from other types of interaction?		
	Why did you feel so?		
			
7.	Did you feel any differences in Skye interaction from other types of interaction?		
	Why did you feel so?		
			
8.	Did you reckon you were more capable of using the learned language in MSN or the Skype interaction?	MSN	Skype
	Why?		
			
9.	Did you feel less anxious in MSN or the Skype interaction?		
	Why?		
			
10.	Were you able to understand your peer better in MSN or Skype interaction?		
	Why?		
			

Part 3:

Please share more about your experiences in the paired interactions and think about your MSN and Skype experiences respectively.

1. What efforts did you make to keep the flow of conversation in MSN/Skype interactions?



2. How did you overcome language difficulties in MSN/Skype interactions?



3. How did you show your cultural/social awareness (social routine/ politeness/ cultural difference) in the learned language in MSN/Skype interactions?



4. What nonverbal aids did you use to help you communicate with your peer in MSN/Skype

interactions?



5. How did you make your expressions (the word pick and order/grammar) as accurate as possible in MSN/Skype interactions?



Thank you for your participation!

Appendix D: Sample Transcripts

(1) Text-based SCMC in English

Dyad 1

1. 08:16:22 LE1: hi (*Social formula*)
2. 08:16:30 LC1: hahaha
08:16:31 LC1: ok hi
3. 08:16:32 LE1: we are come back again
4. 08:16:40 LC1: =we have!
08:16:46 LC1: haha this is so funny
08:16:53 LC1: ok so....
08:17:05 LC1: time to talk about food!
5. 08:17:10 LE1: yap
6. 08:17:29 LC1: soooooo (LE1's Name).....
7. 08:17:39 LE1: yes? (*Punctuation*)
8. 08:17:44 LC1: what do people in your home town usually eat?
08:17:47 LC1: :)
9. 08:18:08 LE1: um... (*Time-gaining strategies*) (*Punctuation*)
08:18:22 LE1: In my home town, people usually eat rice with other dishes, and usually there will be a pot of sup for all of the family.
08:18:28 LE1: i love rice
08:18:30 LE1: haha
10. 08:18:38 LC1: ooooh
08:18:41 LC1: sounds nice
08:18:49 LC1: i like big pots of soup!
11. 08:18:57 LE1: what about u? (*Substitution*)
12. 08:19:02 LC1: um....
08:19:14 LC1: i don't know!
08:19:38 LC1: at home we usually eat some rice with stir-fried meat and vegetables
13. 08:19:56 LE1: so u eat rice too? (*Substitution*) (*Punctuation*) (*Inferential strategies*)
14. 08:19:58 LC1: or maybe pasta and bolognaise
08:20:21 LC1: haha yeah, but in the UK we eat lots of different places' food
15. 08:20:22 LE1: what is bolognaise (*Request for clarification*)
16. 08:20:32 LC1: i spelled it wrong
08:20:34 LC1: hahaha

- 08:20:43 LC1: but i can't remember how to write it
- 08:21:12 LC1: it is meat which is ground up into small pieces
17. 08:21:15 LE1: ha ha t
18. 08:21:22 LC1: and cooked with tomato sauce
- 08:21:25 LC1: and onions
- 08:21:30 LC1: and mushrooms
19. 08:21:38 LE1: ohoh that's sund great! (*Punctuation*)
20. 08:22:03 LC1: so that is kind of your tranditiomal food? (*Punctuation*)
(*Inferential strategies*)
21. 08:22:03 LC1: haha its nice, we had it last night here at my boyfriend's house!
- 08:22:10 LC1: um....
22. 08:22:16 LE1: oh~~ (*Use of text/symbol to display the effects of intonation*)
23. 08:22:19 LC1: no its italian....
- 08:22:20 LC1: haha
24. 08:22:25 LE1: ha
25. 08:22:36 LC1: english traditional food is very borign
- 08:22:38 LC1: boring
26. 08:22:43 LE1: haha
27. 08:23:00 LC1: just roasted meat, roasted potatoes roasted vegetables
28. 08:23:01 LE1: why?
- 08:23:06 LE1: ohoh
29. 08:23:16 LC1: all with meat gravy poured over the top
- 08:23:22 LC1: haha so it is all brown
- 08:23:27 LC1: and all tastes the same!
30. 08:23:42 LE1: do u eat one kinds of bean? (*Substitution*) (*Approximation*)
31. 08:23:50 LC1: um....
32. 08:23:56 LE1: i saw it on the TV
33. 08:23:58 LC1: oh yeah
- 08:24:01 LC1: baked beans
- 08:24:07 LC1: i don't like them!
- 08:24:09 LC1: haha
34. 08:24:12 LE1: haha
35. 08:24:14 LC1: but lots of people do
- 08:24:20 LC1: for breakfast
36. 08:24:24 LE1: what it teast like
37. 08:24:31 LC1: people have egg and bacon and baked beans
- 08:24:32 LC1: um
- 08:24:51 LC1: the beans don't taste like much, just bean-like

38. 08:24:59 LE1: haha
39. 08:25:00 LC1: and the sauce is like sweet tomato sauce
40. 08:25:08 LE1: ohoh~~ (*Use of text/symbol to display the effects of intonation*)
41. 08:25:12 LC1: hahaha
- 08:25:24 LC1: I can send you some if you like!
- 08:25:26 LC1: hahaha
42. 08:25:32 LE1: really!! (*Punctuation*)
43. 08:25:34 LC1: yeah
- 08:26:02 LC1: I am going back to UK on Monday so I will send you some baked beans if you send me your address
44. 08:26:42 LE1: oh! that's so nice~~ (*Punctuation*) (*Use of text/symbol to display the effects of intonation*)
45. 08:26:49 LC1: haha, no problem
46. 08:27:38 LE1: so is that kind of can? (*Inferential strategies*)
47. 08:27:49 LC1: yeah
48. 08:28:13 LE1: oh ~ ok! i got it (*Use of text/symbol to display the effects of intonation*) (*Punctuation*)
49. 08:28:34 LC1: haha cool
- 08:28:37 LC1: ok so
50. 08:28:42 LE1: next one (*Framing*)
- 08:28:44 LE1: ha
51. 08:28:53 LC1: are there any local delicacies from your hometown?
- 08:28:54 LC1: hahaha
52. 08:29:16 LE1: oh ~ lots of local delicious (*Use of text/symbol to display the effects of intonation*)
- 08:29:22 LE1: um (*Time-gaining strategies*)
- 08:29:36 LE1: Steamed dumpling
53. 08:29:46 LC1: mmmm
54. 08:29:46 LE1: have u ever tried it? (*Substitution*)
55. 08:29:51 LC1: i think so
- 08:29:57 LC1: the jiaozi?
56. 08:30:14 LE1: oh no~~ (*Use of text/symbol to display the effects of intonation*)
57. 08:30:18 LC1: oooh
58. 08:30:18 LE1: 小籠包 (*Code-switching*)
59. 08:30:23 LC1: ooooh
- 08:30:26 LC1: yes I have
- 08:30:35 LC1: I went to Din tai feng

60. 08:30:51 LE1: oh ~ that's really famous (*Use of text/symbol to display the effects of intonation*)
61. 08:31:01 LC1: it was AMAZING!
08:31:06 LC1: have you been?
62. 08:31:08 LE1: ha
63. 08:31:14 LC1: its really expensive though :(
64. 08:31:21 LE1: no i haven't
65. 08:31:50 LC1: where do you eat the 小籠包?
66. 08:31:55 LE1: i eat normal 小籠包
08:31:57 LE1: haha
08:32:12 LE1: just some normal restaurant
08:32:38 LE1: or there some strees venders have delicious 小籠包 too
08:32:43 LE1: ha
67. 08:32:55 LC1: i went to a normal one near xinyi road
08:33:10 LC1: it was the same as the din tai feng though!
68. 08:33:20 LE1: ha
69. 08:33:20 LC1: but so much cheaper
08:33:32 LC1: so my friend and I liked that one a lot
70. 08:33:39 LE1: yeah~ (*Use of text/symbol to display the effects of intonation*)
71. 08:33:47 LC1: I never had it from a street vendor
08:33:53 LC1: where do you find them?
72. 08:34:00 LE1: oh ~ (*Use of text/symbol to display the effects of intonation*)
73. 08:34:05 LC1: i like street vendor food a lot
74. 08:34:16 LE1: me too! (*Punctuation*)
08:34:26 LE1: do u like nightmarket? (*Substitution*)
75. 08:34:33 LC1: yeah I do
08:34:41 LC1: they are so fun!
76. 08:34:49 LE1: there are lots~~~ of foods (*Use of text/symbol to display the effects of intonation*)
77. 08:34:59 LC1: hahaha
08:34:59 LC1: yeah
78. 08:35:03 LE1: and they are cheap
08:35:04 LE1: ha
79. 08:35:07 LC1: what is your favourite snack?
08:35:12 LC1: haha yeah they are
80. 08:35:15 LE1: um.. (*Time-gaining strategies*)
81. 08:35:19 LC1: that is why they are so delicious!
08:35:29 LC1: they are also cheap!

82. 08:35:50 LE1: what do u mean about snack? (*Substitution*) (*Request for clarification*)
 08:35:55 LE1: cookies? (*Punctuation*)
83. 08:36:05 LC1: from the night market
84. 08:36:07 LE1: ohoh
85. 08:36:12 LC1: what is your favourite thing to buy
86. 08:36:15 LE1: sticky tofu
 08:36:35 LE1: you don't like it? (*Punctuation*)
 08:36:17 LE1: haha
87. 08:36:20 LC1: hahaha
 08:36:23 LC1: really?
88. 08:36:26 LE1: ya
89. 08:36:33 LC1: stinky tofu
 08:36:45 LC1: haha, I ate it a few times
90. 08:36:58 LE1: i know that many foreigners don't like the smell
91. 08:36:58 LC1: i thought it was OK
 08:37:01 LC1: hahahaha
 08:37:04 LC1: yeah
 08:37:15 LC1: after a long time i got used to the smell
92. 08:37:24 LE1: ha
93. 08:37:36 LC1: hahaha but the taste is ok
 08:37:46 LC1: i like it in the hotpot
94. 08:37:53 LE1: have u ever eat 豬血糕 (*Substitution*) (*Code-switching*)
95. 08:37:55 LC1: i think it makes the broth taste good
 08:38:03 LC1: oooh no i haven't!
 08:38:11 LC1: I saw it but i got scared!
96. 08:38:17 LE1: ha
 08:38:19 LE1: why
97. 08:38:23 LC1: is it nice?
98. 08:38:49 LE1: yeah you should try it next time when you come to Taiwan
99. 08:38:49 LC1: i think because itsblood and rice
 08:38:55 LC1: haha ok maybe i will
 08:39:10 LC1: sometimes i thought it smelled delicious
 08:39:23 LC1: i like the sausages in the night market
 08:39:34 LC1: the red ones?
100. 08:39:41 LE1: yes! (*Punctuation*)
101. 08:39:46 LC1: yum
 08:39:56 LC1: Taiwan has so many delicacies

102. 08:40:15 LE1: yes~~~ I love that! (*Use of text/symbol to display the effects of intonation*) (*Punctuation*)
103. 08:40:34 LC1: mmmm, me too
104. 08:40:34 LE1: and it is convenient to get them
105. 08:40:42 LC1: so convenient!
106. 08:40:45 LE1: ha
107. 08:40:50 LC1: they are everywhere
- 08:40:56 LC1: haha if you are out at night
- 08:41:22 LC1: i think you only have to walk 5 minutes max to get a sausage!
108. 08:41:34 LE1: that's right
- 08:41:50 LE1: did u live near 正大? (*Substitution*) (*Code-switching*)
109. 08:42:01 LC1: no, I lived in Da'an
- 08:42:12 LC1: but it was pretty bad
110. 08:42:17 LE1: why
111. 08:42:26 LC1: in hindsight i would have lived in wanfang community maybe
- 08:42:35 LC1: because it was very very expensive
- 08:42:49 LC1: and the apartment was very damp
112. 08:42:53 LE1: oh really? (*Punctuation*) (*Input elicitation strategies*)
113. 08:43:03 LC1: but, we lived right next to Tonghua night market
- 08:43:08 LC1: which was really nice
114. 08:43:28 LE1: oh by the way (*Framing*)
115. 08:43:34 LC1: yeah?
116. 08:43:50 LE1: have u ever eat 粽子? (*Substitution*) (*Code-switching*)
117. 08:44:02 LC1: what is that?
118. 08:45:29 LE1: we eat it during the dragon festival
119. 08:45:42 LC1: oooh
120. 08:45:47 LE1: do u know that (*Substitution*)
121. 08:45:59 LC1: the dragon festival?
122. 08:46:29 LE1: the shape is like a triangle (*Circumlocution part 1*)
123. 08:46:31 LC1: with the boats?
124. 08:46:48 LE1: covered with some leaves (*Circumlocution part 2*)
125. 08:46:56 LC1: oooh
- 08:47:06 LC1: oh i think i have eaten it before
- ~~~~~
126. 09:29:56 LC1: it was really good talking to you!
127. 09:29:58 LE1: see u next time~~~ (*Substitution*) (*Use of text/symbol to display the effects of intonation*) (*Social formula*)
128. 09:30:00 LC1: speak soon!

129. 09:30:02 LE1: me too (*Social formula*)
 130. 09:30:03 LC1: byebye xxx
 131. 09:30:06 LE1: bye (*Social formula*)
 132. 09:30:11 LC1: haha
 133. 09:30:15 LE1: ha

(2) Text-based SCMC in Chinese

Dyad 1

1. 12:15:09 LE1: 你有去過哪裡旅行嗎
2. 12:15:33 LC1: 。 。 。 (*Punctuation*)
 12:15:38 LC1: 哈哈
3. 12:15:51 LE1: 怎麼哩?
4. 12:15:58 LC1: 我去過很多地方
 12:16:02 LC1: 哈哈
5. 12:16:14 LE1: 那你講幾個你印象深刻的?
6. 12:16:33 LC1: 跟你說中文有一點奇怪! (*Punctuation*)
7. 12:16:38 LE1: 哈
 12:16:50 LE1: 因為我們通常都用英文聊天嗎?
8. 12:16:51 LC1: 好
 12:17:15 LC1: 我每年跟我爸媽去法國
9. 12:17:25 LE1: 挖屋 好棒喔
 12:17:38 LE1: 你門會說法文嗎?
10. 12:17:48 LC1: 我很喜歡那裏
11. 12:18:08 LE1: 我沒去過 但是以後有機會也想去看看~
12. 12:18:09 LC1: 我和爸爸會說一點
 12:18:35 LC1: 你應該去
 12:18:56 LC1: 那邊的人都很 cool (*Code-switching*)
 12:19:07 LC1: 不知道為什麼
 12:19:10 LC1: haha
13. 12:19:46 LE1: 哈哈
14. 12:19:49 LC1: 你去過什麼有意思的地方嗎?
15. 12:20:00 LE1: 我只有去過一次澳洲
 12:20:27 LE1: 我去 sydney
16. 12:20:30 LC1: 哦, 你喜歡嗎?
17. 12:20:36 LE1: 還不錯
18. 12:20:42 LC1: 哈哈

19. 12:20:49 LE1: 看了很多東西
12:21:10 LE1: 你有參加過旅行團嗎
20. 12:21:33 LC1: 你在那裏做什麼事？
21. 12:21:41 LE1: 喔喔
12:21:46 LE1: 我們去了很多地方
12:21:57 LE1: 去歌劇院
12:22:02 LE1: 還有去沙灘
12:22:13 LE1: 騎馬
12:22:20 LE1: 看無尾熊
12:22:34 LE1: 然後參加一些當地的節慶
12:22:44 LE1: 我那時候去的時候剛好是咖啡節
12:22:51 LE1: 有很多很好喝的咖啡
12:23:12 LE1: 每杯只要一塊錢澳幣
12:23:14 LE1: 哈
22. 12:23:31 LC1: 很好玩嗎？
23. 12:23:39 LE1: 我覺得還蠻好玩的
12:23:47 LE1: 因為我那時候是第一次出國
24. 12:23:50 LC1: 那麼多的事！ (*Punctuation*)
25. 12:23:56 LE1: 我自己搭飛機過去
12:24:00 LE1: 就還蠻刺激的
12:24:01 LE1: 哈
12:24:12 LE1: 因為我從來沒有搭過飛機去國外
12:24:45 LE1: 但是我一開始到那邊聽不太懂他們的英文
12:24:47 LE1: 哈
12:24:54 LE1: 他們有一種口音
26. 12:24:54 LC1: 哈哈
27. 12:25:05 LE1: 我還想說我的英文怎麼那麼爛
28. 12:25:26 LC1: 哈哈
29. 12:25:29 LE1: 那妳們去法國都在做什麼事？
30. 12:25:46 LC1: 我想你說得很清楚
12:25:52 LC1: 哈哈
12:25:56 LC1: 對不起 (*Social formula part 1*)
31. 12:26:06 LE1: 怎麼了？
32. 12:26:29 LC1: 我打中文字打得很慢 (*Social formula part 2*)
12:26:33 LC1: 哈哈
33. 12:26:37 LE1: 沒關係啦~
12:26:55 LE1: 我打英文的時候也要想一想 哈
34. 12:27:04 LC1: 哈哈

35. 12:27:07 LE1: 還常常會拼錯單字
12:27:11 LE1: :(
12:27:15 LE1: haha
36. 12:27:33 LC1: 你讓我覺得好一點！ (*Punctuation*)
37. 12:27:45 LE1: 哈
38. 12:27:51 LC1: 哈哈我也是
39. 12:28:00 LE1: 我覺得在英國很棒ㄟ 離歐洲很多國家都很近
40. 12:28:02 LC1: 哦
41. 12:28:05 LE1: 要去玩很方便
42. 12:28:14 LC1: 我們去法國的時候
12:28:33 LC1: 對阿！ (*Punctuation*)
43. 12:29:04 LE1: 你門去法國的時候怎樣呢？
44. 12:29:04 LC1: 因為我爸媽讓我開車，出去玩很方便
12:29:14 LC1: 滑雪
45. 12:30:05 LE1: 好棒喔
12:30:15 LE1: 所以妳們都冬天去嗎
46. 12:30:24 LC1: 我們花一個星期滑雪，喝酒和吃飯
12:30:33 LC1: 對
47. 12:30:47 LE1: 哇屋~~
48. 12:30:51 LC1: 還是春天也可以去
49. 12:30:54 LE1: 很棒ㄟ
50. 12:31:02 LC1: 很好玩
12:31:37 LC1: 去滑雪是我最喜歡的放假
51. 12:31:38 LE1: 那你還有想去哪裡玩嗎
12:31:54 LE1: 喔喔喔 我沒滑過雪ㄟ 感覺很酷
52. 12:32:04 LC1: 我們常常去亞洲
12:33:12 LC1: 哈哈，你一定要去吧！ (*Punctuation*)

(They were disconnected and the internet problem was not solved until the next day.)

53. 12:32:15 LC1: 那，你偏好以何種方式旅？ (*Framing*)
54. 12:32:21 LE1: all right
55. 12:32:23 LC1: 哈哈
12:32:30 LC1: yeah (*Code-switching*)
56. 12:32:48 LE1: 我喜歡自助旅行
12:33:08 LE1: 我覺得自己去旅行可以比較了解一個地方
57. 12:33:26 LC1: 我同意
58. 12:33:35 LE1: 如果跟團的話有時後行程很趕

59. 12:34:19 LC1: 對阿
12:35:18 LC1: 我也想自助旅行比較好
60. 12:35:50 LE1: 那你以後還有想去甚麼地方旅遊嗎?
61. 12:36:14 LC1: 因為不用做你不要做的事
12:36:55 LC1: 還有
12:37:25 LC1: 我要去 New Zealand
12:37:44 LC1: 用中文怎麼說? (*Direct request for help*)
62. 12:38:15 LE1: ?
12:38:18 LE1: 說甚麼?
63. 12:38:33 LC1: 網絡還好嗎?
12:39:06 LC1: racheypop@gmail.com says: 因為不用做你不要做的事 還有
我要去 New Zealand racheypop@gmail.com said (下午 12:37):
用中文怎麼說?
64. 12:40:03 LE1: 我要去紐西蘭?
65. 12:40:30 LC1: 對啊! (*Punctuation*)
12:40:59 LC1: 哈哈
12:41:06 LC1: 紐西蘭 (*Meta-talk*)
12:41:13 LC1: 你呢?
66. 12:41:26 LE1: 所以你還想去紐西蘭是嗎
12:41:30 LE1: 我喔
12:41:37 LE1: 我還蠻想去英國玩的
12:41:38 LE1: 哈
12:41:53 LE1: 我還想去非洲
12:41:54 LE1: 哈哈
67. 12:41:56 LC1: 哈哈
68. 12:42:05 LE1: 我想去看大草原的野生動物
69. 12:42:43 LC1: 噢噢
12:42:56 LC1: 很好，我也要去! (*Punctuation*)
70. 12:43:09 LE1: 我明年暑假要去美國
12:43:18 LE1: work&travel
12:43:23 LE1: 你有聽過這個嗎
71. 12:43:59 LC1: 沒聽過
12:44:34 LC1: 是個公司嗎? (*Inferential strategies*)
72. 12:44:44 LE1: 不是ㄟ
12:44:51 LE1: 它是一個計畫
12:45:03 LE1: 讓全世界大學生去美國打工
12:45:06 LE1: 打工
73. 12:45:24 LC1: 哦，我懂了

(3) Video-based SCMC in English

Dyad 1

1. LE1: Pardon? (*Social formula*)
2. LC1: Have you ever prepared any of them?
3. LE1: Oh, yes. I ur...prepared the...my ur...the English Literature yesterday and today. But I still not finished it. Haa.
4. LC1: Oh, no. Yeah, [I have lots of preparation] to do today as well. Ok, We should we should do it quickly then, so we can get back to our revising...for exam.
LE1: [Uh huh.]
5. LE1: Oh, yes. Haa.
6. LC1: Yeah?
7. LE1: Ok.
8. LC1: Ok, ok. I am looking for the work sheet. Um..I found it↑. At some points, I promise.
9. LE1: ((*cleaning her throat*))...Leisure activities.....So do you get the...the.. topics?
10. LC1: yeah. Yeah. I got them.
11. LE1: Ok. First one. Haa. (*Framing*)
12. LC1: Oh, ok. Wait wait wait... I'm so I'm still getting it.
13. LE1: Ok.
14. LC1: Sorry. I'll be like two seconds...Come on, computer. [Fast, please.] Oh, Not this one. Finding it↑[.] Definitely finding it↑.
LE1: [Haha.]
[Haha]
15. LE1: It's ok.
16. LC1: Oh...
17. LE1: What is that on your wall?
18. LC1: Huh?.
19. LE1: The poster.
20. LC1: Oh, yeah yeah. It's..um [a calendar], which I cut..into squares.
LE1: [haha.]
21. LE1: Oh, you..you.umm. That's beautiful. (*Message replacement*)
22. LC1: Oh. Thanks. I have like I have like. But it's really a cheap calendar. It's from like present[.
] Ok, right. I found it. I found it. Ok. Are you ready?
LE1: [Really? ((*'ly' speak softly since she realizes her peer*

keeps talking.))]

23. LE1: Oh. Yes. [Haaa] Ok. Go ahead.

LC1: [Haaa]

24. LC1: Umm “What is your favorite leisure activities?”

25. LE1: Umm my favorite leisure activities. (*Time-gaining strategies*) Ok. urr I love to see movies or.. or just watch TV and.. that's all. [Haa] It's very boring. Yeah. Because I don't like.. I don't like to exercise or.. yes. And may be just just hang out with friends or family. [Yeah.] So how how about you? What what do you do when your free time?

LC1: [Haa]

[Yeah.]

26. LC1: I'm kind of the same. I like to urr urr to watch movies. A lot, actually. And I.. like to talk with friends. [ok.] And No exercise. I hate exercise hh.

LE1 [Uh huh.] (*Input elicitation strategies*)

27. LE1: Haa. Me too. [I'm lazy.]

LC1: [like...]

28. LC1: No, no..haa.

29. LE1: Haaa. So..ummm..”What are the most popular leisure activities among university students in UK?” (*Framing*)

30. LC1:Ummm...people quite...some people like to play sports quite a lot...like umm football [which]

31. LE1: [Football.] Mm hmm. (*Input elicitation strategies*)

32. LC1: Yeah. Which may be soccer. I don't know if you learned it in American English or English English[.] But..the one they play here is the one would you kick, you kick the ball↑, not would you you hold it↑[.] I don't know. Oh, yeah. No, no. Cause football is quite popular in Taiwan, isn't it?

LE1: [Mm hmm.]

[Uh

huh.] (*Input elicitation strategies*)

33. LE1: Oh yeah yeah. I know that. And I think umm some Taiwan students like to play basketball. Especially guys they love to play basketball and girls...they..I I don't know. Girls may be just shopping or haha hang out with friends[.] got the mails...gossiping.. [haa]..something like that. You know[.] And...and I think most urr most university students like to surfing on internet or...the games[.] Uh huh. So↑

LC1: [Yeah. Haa]

[Yeah.]

[Yeah. I think they do.]

[Yes. Haa]

34. LC1: Umm I don't know. Other than...In England, other than playing football
ummm it's pretty much just drinking...[urr] alcoh..

35. LE1: [Drinking?] (*Confirmation check*)

36. LC1: Urr like the bar.

37. LE1: Ohoh. I heard that before[.] Some some... Yeah. Some friends told
me that you you like to ummm go to some bars, have drinks with friends,
and talk about footballs [or ha, or something like that.] (*Inferential
strategies*)

LC1: [Yeah.]

[Yeah, yeah.]

38. LC1: Exactly. Haaa. Ok. "Some people love to play games with their friends on
line such as Farmville". I love Farmville. Hehee,

39. LE1: What is that? Farmville? (*Request for clarification*)

40. LC1: Umm. Farmville. Do you have the facebook?

41. LE1: Oh. Oh, you mean the facebook. Oh, ok. I know that. [So..
]

42. LC1: [The little farming
game.] Yeah?

43. LE1: Uh hmm. [So do you play that?]

44. LC1: [I I like to play computer games hh]. I got really addicted to it.
I'm like Rrrr Framville.

45. LE1: Haa. So do you do you steal the vegetables from urr other people's urr
farms? (*Inferential strategies*)

46. LC1: I never did that though[.] I only concentrated on my own farm. Haa
LE1: [Haa]

47. LE1: Ok. So you are really honest. Haaa (*Inferential strategies*)

48. LC1: Yeah, haa.

49. LE1: So. "They use computers for long hours a day and it may affect their
health. In addition, few of them are so addicted that they sneak off to play
during work hours. Ummm according to.." (*Framing*) Oh, this is really
long..[ha] topic. Haaa So..

LC1: [Yeah.]

50. LC1: Yeah. "it affects their work performance. On the other hand, it is another
social way to do something with friends at a distance. Moreover, some
claim that could decrease their stress level. What do you personally think
playing of online games as a leisure activities?" Ok, [oh so this is the last

question though]. Ok, so what do you think?

LE1: [Hmmm...

].

51. LE1: Umm I think that is ... (*Time-gaining strategies*) That can.. urr that is kind of leisure activity, but.. but you're urr easily get get addict into it and you know just sat just sit in front of your computer and for.. for several hours and never leave you seat. (*Verbal strategy markers*) (*Self-correction*) Haa... [And I think that] may not be health and...yeah. Yeah, and how how to you think?

LC1: [That's true.]

52. LC1: I think so too. Umm. I think Farmville isn't too bad. Because when you put the crop, you have to wait [] like a day or two days [for harvest]. So like you can't play the game straight away↑[] But..urr..my brother↓[and also I saw it in some of the cybercafes,] in Taiwan it happens too. My brother likes to play like the shooting game↑. Well, [like you take out the gun and shoot them]

LE1: [Uh huh.] [Oh, yeah, yeah.] [Haa]

[Uh huh.] (*Input elicitation strategies*)

53. LE1: [Uh huh. Oh, oh. C..urr..CA...] (*Inferential strategies*)

54. LC1: CS

55. LE1: Oh, yeah yeah yeah yeah. I know that.

56. LC1: Yeah. CS. And also world of the warcraft↑.

57. LE1: Ummm...Sorry? You said...What did you... (*Social formula*)

58. LC1: World of the warcraft.

59. LE1: Huh? World of.. (*Request for clarification*)

60. LC1: I don't know. I don't know if there's a Chinese name.

61. LE1: I don't know. Haa.

62. LC1: Yeah. I don't know. Well they speak in American. I think. But I think play once let people are getting really like.. crazy about it↑. [Oh, I heard about,] I heard about people.. like murdering people [in real world,] because they think they're still playing the game.

LE1: [Haa. yeah, really.]

[Uh huh, yeah, yeah.] (*Input elicitation strategies*)

63. LE1: Uh huh, yeah. I think that that urr actually affects their rea urr really life. (*Inferential strategies*) [You know just..]

64. LC1: [Yeah.] So weird.
65. LE1: Yeah. Haaa. Yeah, that's scared. Haa. Ok. oh...*((couldn't stop coughing for a little while))*
66. LC1: I don't know. Like.. Yeah.. my... it.. umm...my brother is really bad. He is one of the...he is one of the kids who is just like computer computer computer computer computer[...] He's really addicted to online games and stuffs. And I think that when he was younger. Cause he is older than me[.] Umm he is two years older than me[.] But when he was younger, he was kind of ok↑ And but then he started to play the computer games [all the time.] And he was suddenly. Like he gradually got kind of worse↑. And now he got like really angry and like urr he doesn't talk to people properly. Err he got kind of crazy.
- LE1: [Haa]
- [Uh huh.] [Uh huh.]
- [Uh huh.] *(Input elicitation strategies)*
67. LE1: Really?! So, Oh, really?! That's..haa..that's [ha] Rea...haa. Are you are you serious that? *(Message replacement)* [So using that is because]
- LC1: [Yeah. Haa.]
68. LC1: [He is not] He is not that crazy. [But he's a little that] Haa.
69. LE1: [Oh, ok. Haa.] Ok. So you think that is just because he plays the online games so[...] that... Oh, that's not so..Uh huh. Haa. *(Message abandonment)*
- LC1: [Yeah.]
70. LC1: Haaa. Yeah.
71. LE1: So so he don't urr he doesn't usually talk to people or hang out with his friends? *(Self-correction) (Inferential strategies)*
72. LC1: No, he just stays in [whole day].
73. LE1: [He just..] Oh, ok[.] So so urr do your parents worry about that or...
- LC1: [Haaa]
74. LC1: Uh huh. Yeah though. But he got a job recently, so they kind of like YA now he has a job.
75. LE1: Ohoh. That's great.
76. LC1: He still plays you shoot though. [How about you?]
77. LE1: [Haa May be you..]
78. LC1: Huh?

79. LE1: Yeah? Sorry, you say, you say first. Ha. (*Social formula*)
80. LC1: Have any of your friends like.. have a computer kind of addiction or not?
81. LE1: I..I ..Yes. I think that of.. I know that.. I I think this is especially for boys they like to play online games [.] And girls umm I didn't hear so much of girls urr so much about girls (*Self-correction*) who addict to the online games. They.. may be they just play the Farmvili urr or what is that? Farm..[ha] (*Indirect request for help*) Farm.. yeah.. yeah. Just play that. That kind of small games. And not not the shooting games or...yeah.. uh huh.

LC1: [Umm.]

[Farmville]

82. LC1: I think girls like games. A kind of like you share and you talk to people. And you [..] you do things together↑ [to do something↑.] And I think boys like that kind of AHA I am a soldier in the war. [Now I can go around and shooting people.] Boys are crazy...So do you play do you play any games like that?

LE1: [Uh huh, uh huh.] [Uh huh, uh huh.]

[Haa..haaa..

Yeah.] (*Input elicitation strategies*)

83. LE1: No..[I am..] I am natural.. umm I am actually not.. umm not.. I don't like play online games. Haa[.] Because sometimes we... urr for example if we play the facebook, we have to...if I click. If I click an button and I have to wait. (*Circumlocution*) (*Verbal strategy markers*) You know[.] You have to wait. Wait for a moment and they will...urr I don't know how to say. (*Indirect request for help*) Haa. You know? You know what I mean? (*Comprehension check*) [Just umm]

LC1: [No?]

[Yeah.]

[Yeah]

((keep nodding))

84. LC1: [Yeah. The loading.] The loading time. You click and you're [like waiting to play.]
85. LE1: [Yeah, yeah, yeah. Loading time.] (*Meta-talk*) Yes, yes, yes. Haa. That's what I mean. Yeah[.] And I..I ..I..umm I don't have so much urr patient to wait for the game starting or...yeah. So I I don't like play play online games. So do you like to play that?

LC1: [Haa]

86. LC1: No. Umm I do like Farmville. Well, I used to like Farmville↑ a lot.

LE1: [So.. Uh huh.]

(Inferential strategies)

LE1: [Haaa]

LC1: [Haaa Ok.]

LE1: [Yeah. Haa
]
[Ok.]

LE1: [Oh.]
[So you can...Haa]

LE1: [Haaa So.. [Haaa]

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98. LC1: [No, no.]
99. LE1: No? You can't use cell phone...during the class? (*Confirmation check*)
100. LC1: [Can you?]
LE1: [You know...umm.]
101. LE1: Umm sometimes you just haa you know haha. [put the cell phone under desk.] (*Verbal strategy markers*) (*Circumlocution*)
102. LC1: [Oh, yeah, yeah. Use quietly.] Yeah. Haa. I understand. Yeah. We went. When I was learning urr Chinese in Taiwan, [I just like]..in our class there's some Korean↓[...] And the Korean..I don't know why...cause no one else does it, but the Korean whenever the phone rang, they would be like[...] they would pick up..in class↑[...] when the teacher is still talking, and would be like bala bala baba, and then makes us like what what are they doing[.] and then they keep talking. They just leave the room[.] And like just walk out and then talk for maybe ten minutes and then they come back in again and be like [Haaaa And then sit down.] [It was so rude.] [It was so rude.]
- LE1: [Uh huh.]
[Uh huh.]
[Oh, really? Haa.]
[Haa] [Uh huh.]
[Haa, really?] [So you said.]
[Yeah, I think..]
103. LE1: Uh huh. So why why why do they do that? [May be they..] (*Input elicitation strategies*)
104. LC1: [I don't know.]
105. LE1: So err won't won't other classmates or professors just look at look at them or... He urr the professor won't won't be pissed off or.. haa or something. (*Self-rephrasing*)
106. LC1: Yeah. I don't know. They never said anything to them. [Umm] I don't think I don't think they knew. I think they would just like oh my phone rang, so I have to do it.
LE1: [Oh, really?]
107. LE1: Oh, so do you do you know that urr urr I think several months ago, there was urr a writer or something. Yes. She she went to went to Tai-Da and she saw some students eating on the class. You know you know that?
108. LC1: No, I don't know. I don't.
109. LE1: Urr...You don't know. Oh, ok. She just makes some criti urr she just urr

strategies)

117. LE1: Oh, so oh. That's... that's cool, because we.. oh yes.. you you have been in Taiwan for several years, so you know that.. teacher will just talking, talking, talking, speaking, speaking, speaking on class and never stop.

118. LC1: Oh, really? I never been to a Taiwanese class though. [Umm] I I had Taiwanese teachers[,] but we had all different kinds of classes where we would just talk for the whole class↑.

LE1: [Oh?]

[Uh huh.]

119. LE1: Oh, so you urr you don't really attend a...you didn't really attend a class that urr how how to say that. (*Indirect request for help*) [Just like our class.]

120. LC1: [A proper Taiwanese type of class.] Yeah, no. It was was just like foreigner class. [So it just..]

121. LE1: [Oh, just for..] Uh huh.

122. LC1: Yeah. Oh, your video stops...stops moving. Is my video still ok?

123. LE1: So you can not see me now?

124. LC1: Oh, no. I can now. I can now. Oh, it suddenly starts working again. Oh, good. Ok, yeah. So...no. I never I never went to an actual Taiwanese class. What'd they like?

125. LE1: Oh, I I I thought you joined the a normal normal class as..urr with the Taiwanese students.

126. LC1: No. No, no. Haaa.

127. LE1: So your class just for urr some foreigners to.. attend. (*Inferential strategies*)

128. LC1: No. It was urr...it was a real urr basic Chinese foreigners' class. [So] there may be may be eight of us↑. And like just eight of us, so would be like two English, two Americans, two Japan Japanese, two Korean. And we all just speak Chinese together with the teacher↑[.] And like one day we talk about the food that we like [or] one day we talk about going on holiday and stuff that like[.] Urr so it wasn't like proper school. It was just like fun school.

LE1: [Oh.]

[Oh.]

[Oh, ha.]

[Oh, ok.]

129. LE1: Oh. Haa (*Input elicitation strategies*)
130. LC1: Yeah. I think probably proper classes in Taiwan are much harder than proper classes in UK..May be. I don't know. I never been.
131. LE1: Much much what? You said much.. [Har..]
132. LC1: [Harder.]
Like you have to listen quite hard and written down what they said and...
133. LE1: Oh. Yes, yes, yes. We have to write...we have to take some notes and yes juts write down what the professor said and may be they will they will test those notes or something. So we have to be very concentrated on class to you know to take notes... yeah... And yeah.
134. LC1: I think that's good.
135. LE1: You think that's good? Ha.
136. LC1: Yeah. Your teacher's kind of like ok say this and this and this and like they tell it to you, right?
137. LE1: Hu huh. They like to.. umm teachers in Taiwan like to give students a lot of information↑. And I I know I know in other countries the teachers like to umm have some interaction with...their students or students urr students will urr just ask their questions to the teacher or urr speak out their own their own opinion in the class. Right? Is that correct? Haa... [And..]
138. LC1: [We have we have] some classes↑ like we have lectures and seminars[.] So like in the lecture, it's just the lecturer talking↑[,] but usually they don't say anything useful. They just talk about nothing. Umm ha. And then in the seminar, we ask them questions↑, and then kind of an interactive↑.. thing[.] But I think.. I think it's helpful when the lecturer actually sort of... tell you the information and you can write it down. I think it's easier to remember that. Because I think [that] a conversation↑ is easier to remember than umm just writing.. hands. [Do you think...] like it's easier to remember someone says to you than you just write them down?
- LE1: [Uh huh.]
[Uh huh.]
[Uh huh.]
[Umm.]
[umm, that...Yeah.] (*Input elicitation strategies*)
139. LE1: Umm mmm? Yeah. Yes, yes. It's easier than you you read the text the

140. LC1: Yeah. Definitely. And I think it's not as boring.

141. LE1: Huh? Boring? What? Ummm text...

142. LC1: It's not...it's..I think it's not as boring↑[,] if someone says and you write. Cause writing is so boring. That's all I am doing at the moment to study for the exam and I guess..I guess you are too, huh?[,] Just writing writing writing and it's like noooooo ((*fake crying*)).

LE1: [Oh, yeah.]

[Uh huh, yes.]

143. LE1: Ahaha. So you urr you are going to do a Chinese test on Thursday or your economic class? [Or you..]

144. LC1: [I have..] Tuesday I have a Chinese exam and then on Wednesday I have economics and then on Thursday I have urr urr migration. The migration of Chinese people to other places in the world. And then the next week, I have two more exams. So..

145. LE1: So after you finish all of your exams, you have to start your master?

146. LC1: Ummm oh, no. After these exams↑, then we just start being taught again. So we have the next term, and then umm I have umm still another year↑ after this year↑ of my degree. [Cause I am merely a third year] and is a four year course. So[..
] I am not, I am not doing a master. [Haaa] It's really hard. I just don't want to. Haa.

LE1: [Uh huh.]

[Uh huh.] (*Input elicitation strategies*) [Ha]

147. LE1: So you want to just go to find a job after you graduate from school? Urr underschool. school? (*Inferential strategies*)

148. LC1: How about you? Are you doing a master? You want to?

149. LE1: Oh. I want to, I want to go to go to England. Haa. For my graduate school. Uh huh.

150. LC1: Oh, really? [Rrr] That will be fun.

LE1: [Uh huh.]

151. LE1: Yes. Haa

152. LC1: England is pretty good to things like that. What what subject do you want to do in it?

153. LE1: Umm you know at first I I want to.. I want to study in the.. something like urr management or.. But I but I know that.. a lot of schools need urr acquire the job experience, experiences, right? (*Self-correction*) For management.... ((*There's pause in between and her peer's facial expression shows she's unable to answer since she doesn't know about it.*

- So she just moved on.))* May be yeah may be for some schools and so I am..so I am considering I am considering about go to the.. translation or something. Yeah. I am still thinking about that, because..ur...because I think I have to do my test first. The TOEFL. I have to do the TOEFL test.
154. LC1: Oh, yeah, the TOEFL test. [Gotta be hard.]
155. LE1: [I I I think it] Oh, yeah, that's hard. Haaa I think urr and some some students will do IELTS and. But I.. yeah but I...I already signed up to the TOEFL, so.. yeah.
156. LC1: That's cool.
157. LE1: Umm. Uh huh. So I haven't I haven't decide which subject I want to major in.
158. LC1: Umm....Wow.
159. LE1: So what yeah so what kind of job you like to do in the future? Do you have any (.), you know? (*Omission*) Do you?
160. LC1: Umm I just I just organize myself an internship in Beijing [...] To do to work a magazine↑.
161. LE1: [Uh huh.].
Magazine. Oh that. (*Input elicitation strategies*)
162. LC1: Yes. So I am gonna go do that and if I decide I like that↓, I want to go into urr journalism.. But like [political journalism↑.] So like just yeah political journalism.
- LE1: [Oh, oh, that's]
163. LE1: So so you are interested in the.. political issues or...[something] like that. (*Inferential strategies*)
- LC1: [Yeah.]
164. LC1: Yes.
165. LE1: Oh, that's cool. So so you will you will leave urr England after you graduated..[from your school.] (*Inferential strategies*)
166. LC1: [I think] I may go for a.. I may go for a little gap year...again. Umm you get what to do it somewhere [.] But I don't know. May be may be not.
- LE1: [Uh huh.]
167. LE1: Ok. So if.. if I can go to.. go to England and I we can haha I can go to haha I can viz you. Haha. I can visit you.
168. LC1: Yeah, [sounds good.]
169. LE1: [If you] Yeah, if you stay in there....
170. LC1: And then and then I think I am gonna in Taiwan this summer anyway. So we have to meet up when I come to Taiwan.

171. LE1: Oh, yeah. Oh, yeah, definitely. So if you come to if you really come to Taiwan, you have to talk to me. Ok[?] You have to inform inform me, ok?
- LC1: [Ok.]
172. LC1: Haa, I will. I will inform you. Heee It will be fun. I'm really excited to that. I told you I told you my boyfriend urr [gonna go]
173. LE1: [Yes, you said that.] So he will go he will come to Taiwan with you? (*Inferential strategies*)
174. LC1: Yeah, yes. Well, if we're still together by then. That is. Which we may [hahaaa] I don't know. It might help say aloud before that. But, yeah, fingers crossed coming to Taiwan. Haaaa.
- LE1: [Oh, haaaaa]
175. LE1: Haa. Oh, that's goo.. that's great. So so how long will you stay?
176. LC1: Ummm I don't know. May be two months↑...or something.
177. LE1: Oh, that that..Huh?
178. LC1: I I can't say↓. I need to keep my Chinese though. Cause then I have one more year[.] My final year's gonna be really bad, so I need to practice. Heee.
- LE1: [Oh.]
179. LE1: So you you want to urr you want to..be in the..Chinese environment again. (*Inferential strategies*) [So.] To keep your Chinese.
- LC1: [Yeah.]
180. LC1: Yes, definitely. I am just thinking about next week.. [umm] doing the the Chinese conversation↑[.], and I'm really scared haa. Cause I am not as good as in Chinese as you are in English ((*saying with laughter*)).
- LE1: [Uh huh.]
- [Uh huh.]
181. LE1: No, really? No. Don't worry. But I.. urr.. you you you doing urr yeah. Actually, don't worry about that. I think your Chinese is not bad. (*Self-rephrasing*)
182. LC1: Thank you. [Heee] So when I say something wrong, you have to tell me that that is wrong. Cause..
- LE1: [Ahaa]
183. LE1: Ok.
184. LC1: Yeah. Otherwise otherwise I'd just like dabradada [...] And no one will understand what I am saying.

(4) Video-based SCMC in Chinese

Dyad 1

1. LC1: 好, 開始了. 嗯..我不知道. 是"jiē tǐng"嗎? Festivals, " jiē tǐng ". (*Verbal strategy markers*) (*Own accuracy check*)
2. LE1: 蛤? Yeah. Festivals. 節慶.
3. LC1: 節慶. 喔, 好. 節..哈. (*Meta-talk*)
4. LE1: 嗯哼. 嗯哼 ((*say it with laughter*))
5. LC1: 那"請問在台灣有那些節慶?"
6. LE1: 台灣的..台灣就是..過年, 然後端午節, 然後還有..中秋節. 對對. 然後還有什麼? 好像就這幾個比較大.
7. LC1: [我不知道...你..二號]..你說的...節慶. (*Request for clarification part1*)
LE1: [還有掃墓, 清明節].
8. LE1: 一...蛤? 一月二號?
9. LC1: 哦. 不是, 不是. [你說的], 過年[,]然後別的..[那個] (*Request for clarification part2*)
10. LE1: [呵呵] [摠] [中秋節]
11. LC1: 摠, 這是什麼? (*Request for clarification part3*)
12. LE1: 中秋節. 中秋節就是...吃月餅的那個. [诶, 是吧!? 對.] 吃月餅然後還有烤肉的那個.
LC1: [喔~ 吃月餅那個, 呵呵呵]
13. LC1: 喔, 好, 我懂.
14. LE1: 呵呵 你知道吧! 還有端午節, 就是吃粽子.
15. LC1: 摠.. ((*sounds not very certain*))
16. LE1: 你知道粽子嗎?
17. LC1: 粽子. [摠摠摠.]
18. LE1: [你有吃過粽子嗎?] 就是我上次跟你講的那個.
19. LC1: 那個..裡面有飯跟肉跟[...]這樣. 摠. (*Confirmation check*)
LE1: [對對對對.]
20. LE1: 對對對對. 那個是那個是端午節. 然後還有那個...清明節. 清明節就是去拜..拜祖先的那個. 掃墓. 你知道嗎?
21. LC1: 也不知道.

22. LE1: 你不知道這個. 就是清明節就是我們會去, 就是每個家族的人他們會去那個, 去掃, 嗯, 去那個去祖祖先的那個墳墓那邊, 就是去拜拜, 就是去祭拜牠們. 這樣子.
23. LC1: ((*puzzled face*)) (*Mime*)
24. LE1: 你知道嗎? 哈哈哈哈 喔你可能不知道. 沒關係. 那你..那英國嘞? 英國有...
25. LC1: 嗯. 英國..有過年[...]過年
- LE1: [摀]
26. LE1: 摀, 就是聖誕節. [是嗎?]
27. LC1: [聖誕節.] 摀.
28. LE1: 嗯哼.
29. LC1: 摀, 還有兩個. 摀, 情人節.
30. LE1: 摀.
31. LC1: 你們也有. 對不對?
32. LE1: 摀. 我們..可是我們好像是因為...就是國外有然後我們才有. 就是那個好像不是我們本來的節日. 對. 好像是因為你們有, 我們就模仿你們, 這樣. [哈] 對阿. 阿, 我知道了啦, 我知道那個台灣還, 台灣也有情人節. 可是好像叫什麼..七夕, 就是也是類似像情人節那樣.
- LC1: [哈]
33. LC1: 喔~
34. LE1: 對, 就是, 對. 可是台灣也有在過你們的情人節這樣子. 就你們的情人節. 就好像過了很多個情人節這樣.
35. LC1: 摀摀. ((*keep nodding*)) (*Input elicitation strategies*)
36. LE1: 對. 你..那還有什麼?
37. LC1: 你..你那個情人節是什麼時候?
38. LE1: 情..你說我們的情人節?
39. LC1: 摀.
40. LE1: 好像是七月吧. 七月. 七八月的樣子.
41. LC1: 厚. 奇怪, 哈哈 摀.. [摀] 我們也有..那個..不知道怎麼說... (*Verbal strategies markers*) 可是是差不多四月...[摀] 進入的. 摀.. is Easter. (*Code-switching*) 你知道嗎? Easter.

LE1: [哈哈]

[摀]

42. LE1: 喔. 我知道, 我知道.
43. LC1: 好,好.
44. LE1: 是復活節嗎?
45. LC1: 什麼?
46. LE1: 復活節嗎? 還是什麼?
47. LC1: 歐.. ((*rolling her eyes and waving*)) (*Mime*)
48. LE1: 诶 我也不知道. 哈哈. 應該是吧. 是嗎?
49. LC1: 歐...等一下, 我查..我查一下. (*Time-gaining strategies*)
50. LE1: 是那個什麼...有蛋的那個.
51. LC1: 有...摠摠摠.
52. LE1: 什麼有蛋的.
53. LC1: 摠. 摠, 好. [那你知道.] 呵, 好. [摠...那麼]
54. LE1: [喔, 對. 那好像知道.] [呵 哈哈 所以]你們在那個節是做什麼事啊? 就我只知道有什麼蛋還是什麼, 什麼東西?
55. LC1: 摠....大部份就是吃很多巧克力. [摠]可是, 摠復活節的意思是, 如果你是....宗教, [那個]如果你的宗教是Christianity的話, 摠..那..時候是.摠.耶穌(.)的時候. 呵呵. (*Code-switching*) (*Self-rephrasing*) (*Omission*)
- LE1: [摠]
- [摠]
56. LE1: 喔, 所以那是耶穌的生日, 那樣子. [喔~]
57. LC1: [不對]. 不是生日, 是祂被殺死了.
58. LE1: 喔喔喔喔. 喔, 祂死掉的那天. [是嗎? 就是祂死掉的那天喔?]
59. LC1: [摠. 摠摠摠摠]
60. LE1: 喔~所以你們是每個人都會慶祝嗎?
61. LC1: 摠.
62. LE1: 不是說慶祝啦, 就是每個人都會過那天這樣?
63. LC1: ((*nodding and then express uncertainty*)) 蛤?
64. LE1: 每個人就都會..就不管你是信什麼宗教都會過那天嗎?
65. LC1: 喔..如果你不..摠..相信 那個宗教...[阿~~ 呵呵呵. 摠...]就是你不相信那個, 你還要吃巧克力, 就是..[摠] 因為在英國, 我們的...放假[.]都是..摠..跟那些...[宗教..節..]摠..同時.. (*Self-rephrasing*) 哈哈
哈.. ((*express with lots of gestures*)) [我不知道. 就是說...]

66. LE1: [嗯哼. Ok. 哈哈. 沒關係. 哈哈]
[摠]
[摠] [摠]
[喔, 就是都一起的. 沒關係.]
67. LC1: 嗯, 好. 哈哈.
68. LE1: 哈哈 就是你們都, 你們的放假都跟宗教一些有關, 然後都一起放假, 這樣子. 就是大家都會放假就對了.
69. LC1: 摠摠摠.
70. LE1: Ok. 好. 呵呵呵.
71. LC1: 嗯..."那~一個是你喜歡的節慶?"
72. LE1: 最喜歡的. 我最喜歡的是...過年.
73. LC1: 過年. 摠.[為什麼?]
74. LE1: [對.]
因為...因為過年就是可以跟家裡, 就是那種很久沒有看到的家人, 就是一起, 聚在一起, [然後可以]就一起吃飯, 然後可以一起就是聊天. 就是很久沒看到的那種家人, 就是會會, 我們過年都會就是回外婆家或是奶奶家這樣子[.]然後就還可以拿紅包阿什麼的. [哈哈] 然後可以跟, 對阿, 就跟那些小孩一起玩. 就跟親戚阿什麼小孩子可以一起玩阿, 就很好玩這樣子. 還有放鞭炮什麼的.
- LC1: [喔~]
[摠] (*Input elicitation strategies*)
[哈哈]
75. LC1: 摠~~ 我很喜歡..放鞭炮.
76. LE1: 真的喔? 诶, 對阿, 那你那時候來這邊的時候, 你有去放鞭炮嗎?
77. LC1: 蛤?
78. LE1: 你那時候在台灣的時候, 你有去放鞭炮嗎? [那你們有...摠.]
79. LC1: [摠. 嗯...] 對. 就是在台灣, 你們的鞭炮比英國的好.
80. LE1: 蛤, 真的嗎? 哈哈.
81. LC1: 對阿. 比較好玩. 摠, 對. [因為]在英國他們..都有很多, 摠, 保安..
(*Approximation*)
- LE1: [真的喔!]
82. LE1: 喔, 就有規定怎樣的.

83. LC1: 那.....
84. LE1: 警察.
85. LC1: 喔, 不是警察, 就是..嗯, 可能是警察. (*Meta-talk*) 嗯, 每個人都需要用很安靜, 很安靜的用鞭炮. [可是在台灣]
86. LE1: [喔~, 可是會很大聲.] 摠.
87. LC1: 摠. 有很多小孩子都有自己的打火機[,]他們都拋來拋去[,]都..摠..比較好玩. 呵呵呵.
88. LE1: [摠] [摠]
喔, 你是說你是說在英國, 就是如果要放鞭炮就會有很多規定什麼這樣, 就是不會那麼..
89. LC1: 喔, 我不太知道規定是什麼. 等一下, 我要查. (*Meta-talk part 1*) 哈哈
90. LE1: 規定就是, 摠, rules. 就是you have some rules to urr restrict the..[when you.] Yeah. 哈哈
91. LC1: [Oh~~]
哈哈. 好. 謝謝. (*Social formula*) 規定. 摠. (*Meta-talk part 2*)
92. LE1: Uh huh. Ok, 然後, so..對阿, 你那你喜歡什麼, 那你最喜歡你們什麼節日?
93. LC1: 摠..聖誕節. 哈哈.
94. LE1: 聖誕節[.] 就是你們的, 也是你們的過年,對不對? 就像你們的, 就是你們的過年嘛.
95. LC1: [摠.]
不是. 我們慶祝了那兩個, 就是那兩個的時候很緊, 可是, 摠, 過年不是那麼大的, 呃, 的節慶[.] 就是我們一起出去玩, [摠,]喝很多酒, 跟朋友們一起去夜店這樣的時候. 可是聖誕節, 摠, 可能跟台灣的過年節有一些[一樣的東西] 摠, 有一點像. [對,]因為你跟你的家庭都一起坐下吃飯, 然後每個人都有禮物. [所以..]就是很高興的, 摠.
96. LE1: [摠.] [摠.]
[喔, 呵.] [有點像.]
[摠.]
摠摠摠. 所以你們的那個禮物是大人買給小孩, 是這樣嗎? 就買給自己的小孩這樣.
97. LC1: 摠..不一定. 摠, 你知道santa嗎? (*Code-switching*)
98. LE1: Urr yeah. Uh huh. 知道.

99. LC1: 那..呃, 很多大人會, 嗯...裝假扮成
100. LE1: 摠, yeah. 假裝.
101. LC1: 假裝 (*Meta-talk*)他們買的[禮物] 是, 呃santa給小孩子的. 就是他們也要說..[呃,]這是我自己給你買的禮物, 所以小孩子有很多, 摠, 要, 摠解很多很多很...很好的禮物. 可是, 摠, 大人也一起. Ok.
102. LE1: [摠哼.]
[摠.]
哈哈 很多.
103. LC1: 對[] 所以你要也, 呃, 比方說我要..給我媽媽,爸爸,叔叔,阿姨, [呃] 奶奶, 爺爺都要給, 買給他們禮物. (*Circumlocution*)
104. LE1: [摠哼.] [摠.]
所以你們也要買給他們禮物?
105. LC1: 摠.
106. LE1: 所以就大家都要交換禮物那樣嗎?
107. LC1: 摠摠摠.
108. LE1: 所以是, 喔, 可是如果是那種很小的小朋友應該就不用了吧, 就他們只要收禮物就好了, 就那種很小的[...是嗎? 還是他們也會準備禮物,] 就自己做的那種. 呵呵.
109. LC1: [摠摠. 對. 如果你...]
摠, 我想小孩子, 摠, 到了...16, [16歲]的時候, 他們不用買, 買給大人禮物, 可是你16, 16後 [*((pause because someone is shouting in the background))*] 摠, 如果你16歲後, [你要]給大人買東西.
110. LE1: [16歲.]
[哈哈. 沒關係.]
[] [摠哼] 喔
喔, 所以是所以是16歲以後, 你們就, [像你就會要買禮物給爸爸媽媽那些這樣]. 喔~~
111. LC1: [摠摠摠摠.]
[]
不一定是, 摠,16歲,[就是有點不一樣的.] 摠, 我很小的時候, 我媽媽, 摠, 她以前去商店買, 呃, 給我爸爸買東西, 然後[..]很小很小的東西, [她]說喔這是你的女兒買給你的, [可是]不是真的. [他知道不是真的.] 對.
112. LE1: [就大概大概.]

[摠.]

[摠.]

[喔. 呵呵呵.]

[其實是他...

摠.]

摠摠摠. Ok.

113. LC1: 對阿. 可是過年時候,就是大人[給] 孩子錢嗎? 還是...

114. LE1: [摠.]

對, 是. 對, 是大人給小孩子錢[.] 就是, 對. 然後有一些是會給, 譬如說有一些如果假如說我已經開始工作了, 然後我可能就也會, 就我可能會包紅包給爸爸媽媽或是爺爺奶奶之類的[.] 對, 然後通常都是, 對阿, 通常都是... 然後像我爸爸媽媽他們也會包紅包給他們, 就是給爺爺奶奶這樣子[.] 對阿, 通常都是小, 就小孩子就一定會收到紅包這樣[.] 對.

115. LC1: [摠.]

[摠.]

[摠.]

[摠摠.] (*Input elicitation strategies*)

好.

116. LE1: 诶, 你在台灣的時候有... 诶, 你在台灣多久阿? 有超過一年嗎?

117. LC1: 差不多. 九個月. [可是..摠] 我沒樣沒有家人在台灣, 就是有朋友們[..]
會, 我們..摠..一起..摠....從來沒節慶, 慶祝了過年台灣過年.
(*Self-correction*)

118. LE1: [所以你..摠.] [摠摠]

喔~喔~. [所以你那時候在台灣的時候]

119. LC1: [我們慶祝過年,] 那個一月一號的過年.

120. LE1: 元旦. 摠摠.

121. LC1: 可是[我們就..] 喔, 我, 喔. 摠..台灣過年的時候, 我們有放假.
[所以我們不用上課,] 可是...我們就是一起出去玩這樣的東西. 摠.
(*Self-rephrasing*)

122. LE1: [ㄟ那你們就. 摠.]

[摠, 對.]

那你們過年是每個人家裡都會有聖誕樹嗎? 就一定會有聖誕樹嗎?

123. LC1: 摠摠摠摠. 喔, 就是不是在過年. 如果, 摠, 你的家裡一月一號還有
聖誕樹, 一些人可能說是..不幸福.. ((*say these words very softly and uncertainly*)) 喔, lucky. (*Own accuracy check*)

124. LE1: 蛤?
125. LC1: Unlucky↑ (*Direct request for help part 1*)
126. LE1: 喔喔喔喔.
127. LC1: 怎麼說. (*Direct request for help part 2*)
128. LE1: 你再說一次. 哈哈.
129. LC1: 嗯. Unlucky.
130. LE1: Unlucky. 你說, 嗯, 不好運的. 是嗎[?] 就是..你是說unlucky嗎?
131. LC1: [摀]
摀摀摀摀.
132. LE1: 喔~~ 所以就是, 所以你們會, 所以你們新年的時候不會, 不會放聖誕樹. 就是只有在聖誕節的時候這樣.
133. LC1: 對.
134. LE1: 诶那個樹是真的樹嗎? 還是..是真的去外面砍的那種樹嗎? 哈哈.
135. LC1: 有的人有真的樹. 有的人有假的. [我我們家是用假的.....]
嗯...不知道, (*Verbal strategy markers*) 就是.. 嗯那真的聖誕樹, 樹會..
摀..它的葉會..摀..[*((nodding when hearing the correction "葉子"))*] 可能
會破掉(*(say with the gesture to show its falling motion)) (Mime)*]
136. LE1: [喔~那你們家是用什麼? 呵呵呵]
[葉子.....掉下來.]
137. LC1: 摀. 掉下來. (*Meta-talk*) 對, 然後在你家裡的..地上會很亂.
138. LE1: 喔~~~對對對對.
139. LC1: 我媽媽比較喜歡[家的(.) 哈哈] (*Omission*)
140. LE1: [哈哈. Ok.]
Ok. 喔再來是什麼呢~~? 摀~~"*請問通常如何慶祝*" 诶那你們聖誕節
的時候, 會去旅遊嗎? 就是你不是說你們都會去法國玩. 法國玩是
在聖誕節的時候去嗎?
141. LC1: 蛤? 哈哈. [我...] 我每個話都聽不懂.哈哈. (*Request for clarification*)
142. LE1: [蛤.哈哈]
喔~好, 我再..就是我說你們聖誕節的時候會出去玩嗎? 會去哪種旅
遊, 還是就會待在英國這樣子?
143. LC1: 摀..大部分的人都是在英國. 不要去旅遊, 因為是個, 摀, 跟家人慶祝
[的節慶.] 所以..阿不是. 我們都在一起吃烤肉跟..這樣.
144. LE1: [摀.]

會有烤雞什麼的.[你們]

145. LC1: [摠摠摠.] 烤火雞.[Yeah. 不知道為什麼..] 摠.
我媽媽每年自己做[聖誕節的]..餐..摠..餐.[呵呵呵...歐] 最近考試都讓我的頭腦...沒用.

146. LE1: [喔. 是你們就自己做嗎? 摠.]
[喔] [呵呵呵. 沒關係.]

你們. 诶你們考試還沒考完?

147. LC1: 呃還有兩個考試.

148. LE1: 還有兩個.

149. LC1: 摠.

150. LE1: 所以是下禮拜. 這禮拜要考試.

151. LC1: 摠. 禮拜四和禮拜五都有考試.

152. LE1: Ok. 加油.

153. LC1: 摠, 謝謝. (*Social formula*) [摠...] 那泥悶...歐你們過年時候[,]最常做的事?

154. LE1: [呵呵] [摠.]
過年的時候?

155. LC1: 摠.

156. LE1: 喔, 我們過年的時候, 就是很多很多家裡會那個, 會有點就是賭博這樣. 就賭, gambling.

157. LC1: Oh yeah. 好. 哈哈.

158. LE1: Gambling. Yeah. 就是不會賭很多, [就會賭一點.]

159. LC1: [像麻將嗎?] (*Inferential strategies*)

160. LE1: 對, 麻將[,]有些麻, 或是撲克牌這樣. 然後, 對阿. 就是就一起吃飯阿. 然後會去廟裡拜拜這樣.

161. LC1: [喔.]
喔. 你打麻將打得很好嗎?

162. LE1: 沒有. [哈哈.] 我不太會打麻將. [你會打麻將?] 我不太會打麻將, 我很少在玩.

163. LC1: [哈哈.] [我從來沒打過.]
哈哈. 喔.

164. LE1: 所以你有你有打過嗎?
165. LC1: 沒打過...我, 我想, 嗯看起來很有意思, 可是我可能不懂. 因為((say with laughter)) 這樣的, 這樣的, 嗯, 事我平常不太..可以, 嗯, 打. 摠...我不知道[為什麼今天這麼糊塗.((say with laughter))] 我就, 我真的...一個...摠...哈哈.
166. LE1: [呵呵]
呵呵呵, 沒關係沒關係.
167. LC1: 我錯了. 對不起. 呵呵. (Social formula)
168. LE1: 沒關係.
169. LC1: 好. 那..摠..
170. LE1: 再來是什麼↑? [最能代]
171. LC1: [你..]
你最好的過年節是那一個? 你們...做什麼事?
172. LE1: 哼? 哼? 你要說什麼?
173. LC1: 摠. 摠, 那一年是你最喜歡的過年..節?
174. LE1: 摠...好像小時後感覺比較好玩, 長大就覺得還好. 呵呵.
175. LC1: 摠. 呵呵.
176. LE1: 小時後就是, 對阿, 小時後就是因為很多小朋友就會一起玩阿. 然後放鞭炮什麼的. 長大就是覺得, 就覺得還好這樣. 就是小時後會覺得比較好玩, 長大就是...對阿. 摠. 所以以前, 以前小時後就會覺得過年很好玩阿, 然後長大就覺得..就跟家人聚, 聚聚在一起阿什麼的這樣. [摠.] 那你..你有覺得, 那你們過聖誕, 唉, 所以你們過聖誕節也都是每年就是, 就是吃飯這樣? 就差不多就這樣, 對不對?
177. LC1: [((smiling and nodding))] (Input elicitation strategies)
對...我們就是一起吃飯, 一起, 摠, 打開我們的禮物. 然後...一起聊天, 摠, 玩遊戲.
178. LE1: 摠哼. 喔, 你們還會玩遊戲?
179. LC1: 摠摠. 可是..不是很有名的遊戲. 就是..摠..就是我們的家庭的遊戲[.]
摠, 可是我...我同意你以前說的事, 那..我很小的時候, 比較喜歡聖誕節, [可是長大之後] 就..不是那麼好. 就是不要, 摠, 我不用工作[,]也不用..摠..學習....對. [你很小的時候,]你還, 摠, 相信Santa會來給你禮物, [摠,]他的...摠, 就是有一個..有魔技的感覺. 魔技[,]是magic嗎? (Own accuracy check)
180. LE1: [摠哼]

- [摠. 長大. 喔, 對. 呵.]
- [摠.] [哈哈. 嗯哼.]
- [嗯哼.] [摠.]
- 摠, 诶我不知道耶. 哈哈. 我不知道那個英文是什麼.
181. LC1: 歐,[magic.] 摠, 查一下, 呵.... (*Time-gaining strategies*)
182. LE1: [對.]
- 好, 你查一下.
183. LC1: 摠...喔, 魔法? (*Own accuracy check*)
184. LE1: 魔法. 喔, 你說magic. [喔喔. 喔喔. Ok. 我聽成...阿哈哈.] 我剛沒聽懂. 哈哈. Ok. 哈哈.
185. LC1: [魔術. 那不是...是我的口音嗎? 哈哈.]
- 哦, 對. 所以就魔法的感覺, 長大後沒有了.
186. LE1: 喔~~. 摠, 對. 我也這樣覺得. 诶, 喔. 所以, 诶那你, 你今年聖誕節有拿到什麼禮物你很喜歡嗎? 是那個手機嗎? 那個手機是你的聖誕禮物嗎?
187. LC1: 歐, 不是不是. 那個手機是我自己..摠, 自己付的. 就是自己買的. 因為這樣的手機很貴. [摠..] 就是像那個contract. 你每一個月付一點點的錢, [然後....] (*Verbal strategy markers*)
- (*Code-switching*) (*Circumlocution*)
188. LE1: [哈哈哈哈哈.]
- [摠. 喔, 分期付款.]
189. LC1: 摠
190. LE1: 嗎?
191. LC1: 對[.] 所以是, 摠, 比較便宜的. [摠.]
192. LE1: [Ok.] [所以你] 這是你自己買的.
193. LC1: 對. 就是我今年我媽媽給我買很多...摠...洗澡的...東西. (*Use of all-purpose words*)
194. LE1: 洗澡.
195. LC1: 摠. 是, 摠, 很香的...的..
196. LE1: Lotion還是什麼[那種.]
197. LC1: [摠摠.] 像這樣的東西. So like lotion, and soap, [and] shampoo, [and..] (*Code-switching*)摠, 我爸爸給我, 摠..錢. 又是錢 ((*say with laughter*)).

198. LE1: [嗯哼.]
[喔. 呵呵呵.]
哈哈. 歐, 他只會給你錢喔. [哈哈. Cool.]
199. LC1: [對呵呵呵.]
因為他很..他真的[不喜歡]出去買東西. 因為..嗯..聖誕時..候, 嗯..商店都是..很擠.
200. LE1: [喔, 他不知道要買. 摠.]
摠摠. 很多人那樣.
201. LC1: 摠. 東西很貴. 可是, 聖誕節後, 每一個商店, 都有, 摠, 打折.....你知道嗎?
202. LE1: 摠. 喔, 所以聖誕節過後, 東西都會, 都會打折這樣?
203. LC1: 摠摠. [因為]他們有很多東西是, 摠, 把這個東西買給你的..小孩子的東西, 摠..[還是]因為...這時候, 很多人有聖誕, 摠, 聖誕節晚會[,]很多女生要買...衣服.
204. LE1: [喔~~.]
[摠] [摠.]
摠摠摠. 那種costume那種.是嗎?
205. LC1: 不是. 不是costume. 就是...摠, 新的, 很好看的衣服. [所以出去玩,], 跟他們的..同... (*Indirect request for help*)
206. LE1: [嗯哼.]
同事.
207. LC1: 同事. 可能是.(*Meta-talk part1*) [喔. 如果你]
208. LE1: [Colleague. 是colleague嗎?]
209. LC1: 摠. 對對對. Colleague, 同事. 摠[.] 對. 摠...對. (*Meta-talk part2*)
他們, 他們平常有很多...摠..同事..晚會, 所以..很多人要買新衣服.
然後, 聖誕節後, 每個東西都便宜..一點.
210. LC1: [摠哼]
喔~喔~, 所以應該是, 應該是聖誕節因為很多人都要買新的東西, 所以就會比較貴這樣[.] 然後之後就會開始打折這樣[.] 喔~~.
211. LC1: [摠.] [摠.]
所以現在, 摠很多商店有便宜的東西, 因為..摠..是..差不多..摠..back to normal. (*Code-switching*)所以..摠..一月一號..摠..在商店有很多很多便宜的東西, 可是人..[摠..] (*Indirect request for help*)

212. LE1: [很多.]
213. LC1: 人很多. 對. [很興奮.] 都要買很多很多很多東西. [所以] 差不多...兩個三個禮拜後, 嗯..商店, 呵商店只有一些一些東西剩. 嗯, 大部份的就是不好看的, 沒有人要買的 [] 很便宜東西, 所以..現在去買東西, 沒有用.
214. LE1: [呵呵.] [哈哈.]
[嗯哼.]
呵呵呵. 诶, 所以你現在已經回學校了嗎? 所以你現在是在學校的宿舍裡面嗎?
215. LC1: 哼?
216. LE1: 你現在已經回學校了?
217. LC1: 嗯...學校了. 是什麼? (*Request for clarification*)
218. LE1: 摠, 對. 我說你現在, 所以你現在已經在學校裡面了嗎?
219. LC1: No~~. 我不懂你在說什麼. 哈哈. (*Request for clarification*)
220. LE1: 哈哈. I mean, I mean you are in the, you are in your school now?
Umm..
221. LC1: Oh, I am, I am in the. 我在..嗯... right city. 可是, 嗯... 我.. 現在在我..我的房子.
222. LE1: 摠哼.
223. LC1: 對. 呵呵.
224. LE1: 诶那. 所以, 喔~ 所以..Leeds, 你說你在Leeds?
225. LC1: 摠.
226. LE1: 所以那邊是一個...是city還是比較..鄉下的, 還是比較偏僻的地方?
227. LC1: 摠, Leeds是一個..很大的..城市.

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