COMMUNICATION STRATEGY USE AND NEGOTIATION OF MEANING IN
TEXT CHAT AND VIDEOCONFERENCING

YING ZHAO

Bachelor of Arts
Capital Normal University, Beijing, China
July 1995

Master of Education
Cleveland State University
December 2000

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the Office of Doctoral Studies,
College of Education and Human Services
and the College of Graduate Studies by

Maria Angelova, Chairperson
Teacher Education 04/27/2010

Joanne Goodell, Methodologist
Teacher Education 04/27/2010

Joshua Bagaka’s, Member
Curriculum and Foundations 04/27/2010

Ron Abate, Member
Teacher Education 04/27/2010

Lee Wilberschied, Member
Modern Languages 04/27/2010
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ABSTRACT

This study aims at investigating meaning negotiation and communication strategy use among nonnative speakers of English in text chat and videoconferencing. Learners in a Chinese and a Japanese university participated in text chats and videoconferences to discuss culture-related topics using English as the common language. Text chat scripts and videoconferencing transcripts were analyzed using a simplified version of the meaning negotiation model developed by Smith (2003a). A survey was conducted on communication strategy use. Results of the discourse analysis and the survey indicate that both text chat and videoconferencing are valuable tools to assist meaning negotiation and facilitate second language acquisition. Compared to videoconferencing, text chat has the potential of promoting lexical acquisition.
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CHAPTER I
INTRODUCTION

New technologies have created possibilities for language learners to explore the world. Language learners practice the target language by communicating with native speakers or other language learners with the help of the computer and the Internet. Herring (1996) defined computer-mediated communication (CMC) as communication that takes place between human beings via computers. This definition fits into the computer-as-toolkit model developed by Crook (1994). It is important for language teachers to understand the pedagogical value of CMC in second language acquisition (SLA).

CMC has existed since the 1960s, and become widespread since the late 1980s (Warshauer & Kern, 2000). CMC allows language learners to communicate with native speakers of the target language or other learners. The communication via computer networks can be asynchronous or synchronous. Asynchronous communication occurs in delayed time and does not require the simultaneous participation of interlocutors. Email and bulletin boards are common examples of asynchronous communication. Synchronous communication occurs in real time and requires simultaneous participation.
of all interlocutors. The interaction happens between people over local or a global computer networks. Typical forms of synchronous interaction include text chat, and audio and video conferencing. In text chat, messages are typed, sent, and received instantly. Video conferencing is a live connection between people in separate places. Similar to text chat, the purpose of a video conference is communication (Selim, 2005). As it combines video, audio, and often text and graphics, video conferencing is able to provide a simulation of a face-to-face meeting environment, and enable all parties to see and hear each other, as well as to present materials to each other (Gowan & Downs, 1994).

Research suggests that CMC may be beneficial to second language development. Earlier studies tended to focus on the quantifiable aspects of CMC. A number of studies (see Kern et al., 2004; Warschauer, 1997) compared the amount of participation in face-to-face and computer-mediated discussion and found that learners participated more in the computer-mediated mode. Chun (1994) and Warschauer (1997) compared language functions in face-to-face and online communication and proved that learners were able to use similar language functions in the online and face-to-face communications. Warschauer (1997) examined the linguistic features of online discussion and found more complex lexical and syntactical features than in face-to-face discussion. It appears that online discussion plays a similar role as face-to-face discussion in language acquisition.

The relationship of discussion activity and language acquisition has been studied for decades. Long’s (1985, 1996) widely cited assumptions connect discussion and
language acquisition from a social constructivist perspective. Learners acquire language rules through participating in discussions and use various language functions during the discussion. The language functions include meaning negotiation and communicative strategy use.

This study analyzed meaning negotiation and communication strategy use in CMC among Chinese and Japanese learners of English. This was a self-study in nature since the researcher observed her own class which was a joint elective course in a public university in China and a private university in Japan. The course had two major goals: using text chat and videoconferencing to improve learners’ English language proficiency and to promote culture awareness. Closely related to these goals, the researcher’s aim for the current study was to find out how text chat and videoconferencing facilitate language acquisition through meaning negotiation. Students taking the class might have had their own goals. Since this was a self-study of an on-going class, the researcher did not have control over the task design and the selection of participants.

Students taking the course were not assigned specific language tasks. The topics for text chat and videoconferencing were chosen by the students and were all culture related in nature. For example, a group of Chinese students chose to talk about the Chinese Spring Festival and their partner Japanese group introduced the Japanese New Year. Since this course was taught in English and all the communication activities were carried out in English, students taking the courses in both China and Japan were expected to improve their English language proficiency through the text chats and the videoconferences. The assessment of the course included a research paper on the
topics discussed during the text chats and videoconferences, and an oral presentation of the paper. Even though the assessments were not directly targeted on language acquisition, students were expected to use English for both the paper and the presentation. Such a course provided the researcher an opportunity to examine meaning communication in a more realistic setting. The cultural differences between the Chinese and the Japanese students induced a natural desire for communication but also created difficulties in understanding each other. Since the text chats and the videoconferences were carried out in English, it was therefore possible to examine how the students used negotiation strategies and negotiated meaning when they used English in real-life settings.

Communicative interaction among NNS may promote negotiated interaction and improve SLA. The potential benefits of meaning negotiation include making input more comprehensible through input modification, eliciting comprehensible output, and providing feedback which forces learners to focus on language form etc. (Smith, 2003a). As a result, of meaning negotiation, learners will be able to pay attention to the language they produce and modify the language to avoid non-understanding. Non-understanding is different from misunderstanding. Non-understanding refers to interlocutors showing signs of not understanding a remark, but not making false assumptions on a problematic remark as when misunderstanding happens. Varonis and Gass (1985) suggested that negotiation of meaning during NNS face-to-face interaction occurs when there is a lack of shared background but a shared incompetence in the target language. Negotiation episodes are responses to nonunderstanding as opposed
to misunderstanding (Smith, 2003a). According to this model, negotiation of meaning is composed of three phases as shown in Figure 1.

![Diagram](image)


Nonunderstanding as triggers, are problematic utterances that cause the negotiation of meaning. Triggers can be lexical/semantic, structural, content, discourse, and pragmatic in nature. Indicators are signals of nonunderstanding, which are either explicit or implicit. Confirmation check and clarification requests are also considered indicators. Responses are utterances by the respondent that replies to a signal of nonunderstanding. Responses can be minimal or elaborative, or modification of the problematic utterances that have caused the nonunderstanding. Reactions to the responses are signals that learners are ready to resume the main line of discourse. This phase normally takes the form of an explicit statement of understanding such as “I see,” “OK,” “Please continue,” or willingness to continue even though there are still problems “I don’t understand. Let’s talk about something else.” This phase is optional.

Based on the Varonis and Gass (1985) model, Smith (2003a) developed an extended model to examine meaning negotiation in CMC. The extended model includes two new categories besides the four phases: confirmation and reconfirmation. The current study used Smith’s (2003a) model to examine meaning negotiation in both text chat and videoconferencing.
The other issue that this study intends to address is communication strategy use during NNS text chat and videoconferencing. Speakers use communication strategies to enhance self-expression and comprehension in order to achieve successful communication in situations where there is communication deficiency. The subject of communication strategy use in face-to-face communication has been researched for decades. Tarone (1977) explains communication strategy under five categories: avoidance, paraphrase, conscious transfer, appeal for assistance, and mime. These are systematic attempts that learners use to express or decode meaning in the target language when they have not formed the appropriate target language rules. Færch and Kasper (1983) define communication strategies as “potentially conscious plans for solving what to an individual presents itself as a problem in reaching communicative goal” (p. 36). Long (1983) claims that strategies are discourse management tools and devices of conversation maintenance employed to avoid communication breakdown. A more recent study done by Smith (2003b) suggests that communication strategies can be considered independently from compensatory strategies. Communication strategies reflect how learners interact in an effort to create meaning and avoid potential problems in communication during completion of tasks.

**Pilot Study**

A pilot study was conducted to compare and contrast text chat and videoconferencing between NNS, in order to find out how NNS negotiate meaning in free discussion activities. College students in China and Japan participated in weekly text chats and videoconferences as required by a cross-cultural communication class
offered simultaneously in a public university in the capital city of China and a private university in the capital city of Japan.

The pilot study aimed at answering the following research questions:

1. Does NNS-NNS negotiation of meaning occur during synchronous text chat and video conferencing in free discussion tasks?
2. How do negotiation routines in text chat compare to those found in video conferencing?
3. What (if any) is the benefit of negotiation of meaning in NS-NNS communication through text chat and video conferencing?

A total of 46 hours and 54 minutes of videoconferencing were collected. Nine video conferences for a total of 9 hours 37 minutes were transcribed, using a simplified version of orthographic transcription techniques developed by Sacks et al. (1974). The transcription of the selected videoconferencing contains 21,063 running words. To match the size of the videoconferencing data, out of a total of 108 text chat logs (127,203 running words), 15 text chat logs of 20,994 running words were randomly selected and analyzed. Chat logs were coded in part using the Compleat Lexical Tutor (http://132.208.224.131/) online text analysis tool (Sevier, 2004).

Results show that negotiation of meaning occurs in both text chat and videoconferencing. The participants negotiated meaning four times more often in videoconferencing than in text chat. Compared to that in text chat, the negotiation routine in videoconferencing more closely resembles face to face communication. It appears that videoconferencing is more effective for communicative language learning.
However, the high occurrence of meaning negotiation in videoconferencing can be attributed, in part, to the fact that pronunciation errors and accents caused nonunderstanding very often in videoconferencing, while they do not present problems in text chat. Results of the pilot study show that both text chat and videoconferencing appear to be effective tools in cross-cultural communication, and that videoconferencing resembles face-to-face communication in its pedagogical value (Kinginger, 1998; Zahner, Fauverge, & Wang, 2000).

**Purpose of the Study**

The purpose of this study is to understand how non-native speakers of English negotiate meaning and use communication strategies in text chat and videoconferencing. Text chat and videoconferencing are two different modes of synchronous CMC, and are being used by more and more language learners, especially those who would otherwise not find it easy to communicate in real time. It is important to know in what way these CMC channels facilitate communication and therefore improve SLA.

The unique functions of text chat and videoconferencing demand attention from researchers and classroom language teachers. Text chat is considered as conversation in slow motion (Beauvois, 1992), while videoconferencing is able to increase the speed to that of the face-to-face conversation. However, the conversation routines via text chat and videoconferencing may still be different from that of the face-to-face, and therefore bear unique characteristics.
Learners’ communication routines via text chat and videoconferencing should be analyzed in order to compare and contrast the two CMC modes in their impact on meaning negotiation and communication strategy use. The communication routines among NNS in free discussion tasks call for more attention because text chat and videoconferencing are often used among NNS, for whom free discussions are a popular task type in the language classroom. This study attempts to reveal these essential perspectives.

**Research Questions**

1. How do negotiation routines in text chat compare to those in videoconferencing?
2. How do communication strategies NNS use in text chat compare to those found in videoconferencing?
3. How do text chat and videoconferencing shape meaning negotiation and the use of communication strategies?
4. What should teachers know about meaning negotiation and communication strategy use in text chat and videoconferencing in order to improve SLA teaching and learning with technology?

**Significance of the Study**

The significance of the study lies in how teachers should make use of computer technology to improve language teaching and learning. The topic appears to be important for students who do not have opportunities to practice the target language outside the classroom. In countries like China and Japan, where English is taught as a
subject in school but not used outside the classroom, learners seldom practice the
target language in real life settings. As a result, learners in China and Japan tend to have
trouble communicating with native speakers of English after several years of learning
English in school, even though they may be able to score high in standardized English
language tests like TOEFL (Test of English as a Foreign Language). There is a need to
create opportunities for learners to communicate with native speakers of English or
other NNS to acquire real life experience of using English.

Teachers need to know how computers and the Internet can facilitate language
learning. The use of CMC has been promoted in recent years through free software and
Web-based programs like Yahoo Messenger, MSN Messenger, AOL Instant Messenger,
etc., making CMC a potential tool for the language classroom. Both text chat and
videoconferencing offer low-cost communication channels among language learners. In
China and Japan, text chat and videoconferencing are becoming popular in the language
classroom. The increasing popularity of text chat and videoconferencing calls for more
academic research on the potentials of these tools in order to guide the use of them in
the classroom. This study adds to the research on using computer technology,
especially text chat and videoconferencing, in language classrooms.

Compared to text chat, videoconferencing has not been widely researched. One
possible reason is that videoconferencing is relatively a new mode of CMC, and it
requires more complicated hardware setup. The other reason may be the assumption
that videoconferencing too closely resembles face-to-face communication to be worth
separate study. The limited research (see Kinginger, 1998; Zähner, Fauverge, and Wong
2000; Masanori and Kanji, 2007) on videoconferencing proves the resemblance, but also
provides some evidence that videoconferencing is unique in its pedagogical significance.
The current study attempts to bridge the gap by examining learners’ communication
routines in videoconferencing, and compare and contrast videoconferencing with text
chat, the more thoroughly researched CMC mode.

Studies on CMC usually focus on communications between non-native speakers
and native speakers (NNS-NS), or between non-native and non-native speakers (NNS-
NNS). In the NNS-NNS research, it is very rare to find communications between Chinese
and Japanese learners of English. In both China and Japan, English is considered the
most important foreign language and is taught nationwide. With the increased
accessibility of computer technology in these two countries, it is important to study the
potential of text chat and videoconferencing in the English language classroom in China
and Japan. This study is based on a cross-cultural English language learning project
between a Chinese and a Japanese university. The results of this study will shed light on
using text chat and videoconferencing in English language classrooms in China and Japan.

Limitations

This study has limitations. The participants are not randomly selected; instead,
all students registered in a selected course will participate in the study. Because of the
course schedule, the number of text chats and videoconferences is limited. However,
the goal is to study meaning negotiation and communication strategy use in text chat
and videoconferencing, the limited number of communications will give the researcher
opportunities to study in depth through discourse analysis. The researcher’s own
language and cultural background as a native speaker of Chinese can also be a drawback because there might be misunderstandings of the pronunciations of the Japanese participants when transcribing and coding the videoconferences.

**Definitions**

*Computer mediated communication (CMC):* Using computer networks to transmit messages. There are two types of CMC, synchronous and asynchronous.

*Synchronous CMC:* “Real-time interaction (usually written), between people over either a local- or wide-area network” (Smith, 2003b).

*Asynchronous CMC:* Different from synchronous CMC, there is a “significant delay between the time the message is sent and when it is received by the addressee” (Smith, 2003b).

*Text based chat/Text chat:* A type of synchronous CMC, in the written form. Messages are typed, sent, and received almost instantaneously depending on the transmission speed of the computer network.

*Videoconferencing:* A type of synchronous CMC. Participants can see and hear each other through audio and video devices.

*Meaning negotiation:* When nonunderstanding occurs during communication, the conversation is interrupted by discussions on the meaning of the language parts that have caused the nonunderstanding.

*Communication strategies:* Discourse management tools and conversation maintenance devices that learners use to express meanings and avoid communicative breakdown.
CHAPTER II

REVIEW OF LITERATURE

Text chat and videoconferencing are both synchronous computer-mediated communication (CMC) methods in second language acquisition (SLA). In synchronous CMC, interaction occurs in real time and therefore prepares learners to communicate in real-life settings (Yukselturk & Top, 2006). There is a growing body of research that investigates synchronous interaction in text chat and videoconferencing. Many of the research studies focus on whether second language (L2) learners negotiate meaning during the interaction and how the interaction compares to that noted in the face-to-face literature (Smith, 2003, a).

Closely related to negotiation of meaning is learners’ use of communication strategies in CMC. Though insufficient in number, research findings have demonstrated that learners are able to use various strategies in text-based communication, and the CMC environment plays a role in shaping the use of the strategies. Further study is needed to compare negotiation of meaning and strategy use in text-based chat and video conferencing in order to differentiate the pedagogical roles of these two different, yet popular, modes of communication in SLA.
CMC and the Constructive Approach to Language Learning

According to the Russian psychologist Lev Vygotsky (1978), the locus of learning is not exclusively within the individual’s mind but rather is a product of social interaction with other individuals. The emphasis in constructivism is on creating real-world environments for problem solving. Social interaction through language is a prerequisite to cognitive development. Every child reaches his or her potential development, in part, through social interaction with adults and peers. Vygotsky’s zone of proximal development (ZPD) is the distance between a child’s actual cognitive capacity and the level of potential development (Vygotsky 1978). Ohta (2005, p. 414) believed that “the implication of ZPD for SLA is that what the learner can be assisted in doing is soon to be something that the learner will be able to do without help”.

In the field of second language research, one of the most widely discussed social constructivist positions emerged from the work of Michael Long (Brown, 2000). Long (1985, 1996) posited the Interaction Hypothesis (IH), which claims that comprehensible input is the result of modified interaction, which is defined as the various modifications that native speakers and other interlocutors create in order to render their input comprehensible to learners. The IH is an extension of Krashen’s (1982) Input Hypothesis, which is expressed formulaically as i→i+1, where i refers to input and 1 to modification of the input, signaling structures that are beyond the learner’s current level. In moving from stage i to stage i+1, it is necessary for the acquirer to understand input that contains i+1. In order for SLA to proceed, learners must be exposed to target language data, which Krashen termed comprehensible input. Based on the Input Hypothesis,
Long’s IH emphasizes the importance of interaction and input in the process of language acquisition. Learners and conversation partners negotiate meaning so that incomprehensible or partly incomprehensible input becomes comprehensible. During this process of meaning negotiation, problem utterances are checked, repeated, clarified, or modified in various ways in order to reach the i+1 level, (Swain, 1985). Learners not only practice language forms and grammatical structures during conversation, more importantly, they acquire language rules through interaction with native speakers and other language learners. The socially mediated interaction leads learners into Vygotsky’s (1978) ZPD.

Besides focusing on how learning happens during instances of communication failure, researchers have also noticed that learners help each other as they interact (Ohta, 2005). Wood et al (1976) used the term scaffolding to describe learner assistance, which is a feature of learner talk and is claimed to promote L2 development (Ohta, 2005). From a ZPD perspective, learner assistance provides opportunities to reach a linguistic production level which an individual learner would not be able to attain through working alone. Scaffolding also fits in Long’s (1985, 1996) IH as learners gain comprehensible input through scaffolding.

The connection between interaction and acquisition has been widely researched since the existence of CMC. Research suggests that CMC may be beneficial directly or indirectly to second language development. Earlier studies tended to focus on the quantifiable aspects of CMC. Warschauer (1997) compared the amount of participation in face-to-face and computer-mediated discussion and found that learners participated
more in the computer-mediated mode. Chun (1994) and Warschauer (1997) compared the use of language functions in face-to-face and online communication to prove that learners were able to use a variety of language functions in online code as well as in face-to-face communication. Warschauer (1997) also examined the linguistic features of online discussion and found more complex lexical and syntactical features than in face-to-face discussion.

In recent years, research studies have documented a wide variety of uses and benefits of CMC. Both asynchronous and synchronous CMC are found to promote cultural learning (Ware & Kramsch, 2005; Ware, 2005; Dubreil, 2006; Itakura, 2004; Lomicka, 2006; O’Dowd, 2003; Martha et al, 2000; Freiermuch, 2001; Liaw, 2006; Zeiss & Esabelli-Garcia, 2005), increase cooperation and collaboration (Martha et al, 2000; Lee, 2001; Maushak & Ou, 2007), and create a low stress, low anxiety learning environment (Roed, 2003; Lee, 2002a; Bradley & Lomicka, 2000)

The teaching of culture is considered a very important part of language teaching (Liaw, 2006). In the 1980s, the emergence of the communicative approach enhanced the importance of culture in the foreign language curriculum (Canale & Swain, 1980; Seelye, 1988). The communicative approach claims that communication is not only an exchange of information but also a value-laden activity as it encourages learners to take on the role of the foreigners so that they might gain insight into the values and meanings of the foreign culture (Byram & Morgan, 1994). More recently, the term "intercultural competence" has been used to indicate that the goal of L2 learning is to communicate across different cultures (Liaw, 2006). “Intercultural" reflects the view
that foreign language students need to gain insight both into their own culture and the foreign culture, as well as be aware of the meeting of cultures that often takes place in communication situations in the foreign language. Learners need to become familiar with what it means to be part of their own culture, so that they will be ready to reflect upon the values, expectations, and traditions of other cultures.

Computer networks connect language learners at different locations and learners can communicate either synchronously or asynchronously. The networks appear to be an ideal tool for cross-cultural communication because networks create virtual environments that allow L2 learners to interact with other L2 learners as well as native speakers of the target language in realistic interactive settings. Some recent research has focused on language learning and cultural and intercultural learning (Kern et al, 2004). Researchers focused on the effect of CMC participation on L2 learner’s willingness to learn more about the target culture and also seek to discern whether CMC improved L2 learners’ self-perception of their cultural awareness. O’Dowd’s (2007) reported findings of three studies which were carried out in university level English as a Foreign Language (EFL) classes in Germany. The three groups used various combinations of communication technologies such as email, web-based message boards, and video conferencing in order to engage in online exchanges with different partner classes in Ireland and the USA. The research revealed that virtual intercultural contact can contribute to the development of intercultural communicative competence, and the success of such exchanges often depends on their appropriate integration into the language classroom.
Another study on CMC and intercultural competence done by Liaw (2006) used asynchronous communication in a college level language course. Language learners in Taiwan were grouped with American university students majoring in ESL/bilingual education who commented in English on articles about Chinese culture on an online forum. Taiwanese students demonstrated intercultural competence in their e-forum entries and proved CMC’s potential of promoting intercultural competence. It is worth noting that forum entries from the American students were not included in the analysis in this study. The one-sided research material made it hard to relate the findings to cross-cultural communication rather than L2 learners’ own culture awareness. Besides, the one-sidedness in language usage could be a barrier in attracting native speakers of the target language to participate in cross-cultural activities like this.

Learner perceptions of cross-cultural asynchronous communication activities also review that CMC is effective for increasing intercultural awareness. Zeiss and Esabelli-Garcia (2005) reported that CMC was most effective for increasing awareness about the topic of current events, followed by daily life and educational systems.

Besides promoting cultural awareness and intercultural learning, CMC has the potential of improving collaboration and cooperation among language learners. Warschauer (1997) explores the collaboration in CMC using a conceptual framework that starts with Krashen’s (1982) theories of input and output, and leads to the sociocultural learning theory. Warschauer (1997) considers online communication among language learners as “computer-mediated collaborative language learning” (p. 470), which facilitates the intake of comprehensible input and therefore makes 12
developments possible. This assumption echoes Vygotsky’s (1962, 1978) theories on social interaction. Social interaction is important in creating an environment to learn language, learn about language, and learn "through" language. Vygotsky’s (1978) perspective of language learning examines interaction within a broad social and cultural context, in which collaboration plays an important part. This particular socio-cultural approach provides a useful framework for understanding collaborative learning in the language classroom and for evaluating the potential of online language learning to assist that process (Warschauer, 1997).

Collaboration and cooperation are considered synonymous by some researchers (Benson, 2001; Johnson and Johnson, 1984). However, Beatty and Nunan (2004) explained that cooperative can also be contrasted to collaborative in that cooperation only requires that learners work together, each learner completing a part of the task, rather than negotiating with others about all aspects of the task, as is necessary in collaboration.

Martha et al (2000) studied asynchronous and synchronous communication between Japanese and American students. Results proved that online collaboration happened in both asynchronous and synchronous modes. Maushak and Ou (2007) reported similar results that synchronous communication facilitates graduate students’ online collaboration and their perceptions of synchronous communication. In their study, transcription of synchronous discussions revealed collaborative interactions that are similar to that in face-to-face situation. Students’ reflections showed that they
deemed the synchronous communication activity as a positive and productive experience despite some scheduling and technical issues.

Murphy (2004) reported a study involving the identification and measurement of collaboration in an online asynchronous discussion activity, and raised the question whether cooperation in CMC can reach the ultimate goal of collaboration. A conceptual framework was used to describe collaboration in CMC following the process of social presence, articulating individual perspectives, accommodating or reflecting the perspectives of others, co-constructing shared perspectives and meanings, building shared goals and purposes, and producing shared artifacts. Analysis using this framework revealed that CMC increased collaboration. However, participants engaged primarily in processes related to social presence and articulating individual perspectives, and did not reach the stage of sharing goals and producing shared artifacts. This result echoes Johnson and John’s (2004) finding that although the effectiveness of CMC has been identified, not all learning groups are collaborative and technologies can either facilitate or obstruct collaboration.

The reviewed studies display various results of collaboration and cooperation found in CMC activities. Although results vary, the studies all seem to indicate that both asynchronous and synchronous CMC have the potential of encouraging learners, especially globally distributed learners, to construct knowledge collaboratively.

Research findings show very limited discrepancy that CMC creates a low stress, and low anxiety learning environment. Horwitz et al (1986) defined foreign language anxiety as a form of situation-specific anxiety, which has three components: (a) test
anxiety, (b) fear of negative evaluation, and (c) communication apprehension.

Communication apprehension refers to oral communication and may include difficulties speaking with a partner or in groups, stage fright and receiver anxiety. Disruptive effects of anxiety are found in SLA (MacIntyre, 1999; Onwuegbuzie et al, 2000a; Onwuegbuzie et al, 2000b). Both asynchronous and synchronous CMC have been proved to be low anxiety environments for mainly two reasons. First, CMC creates a rather anonymous environment (Roed, 2003). Learners view communication through the computer network as behind a “shield from being on-stage” because of the lack of paralinguistic and social clues (Bradley & Lomicka, 2000, p. 362). Second, CMC, especially asynchronous CMC, allows learners to participate at their own pace. Participants have more time to plan and write their messages, therefore compensating for the cognitive interference of anxiety.

Roed (2003) explored communicative behavior patterns in a virtual environment on WebCT among NNS, where every student was given an identity of a famous person, and the task was to interview each other and find out the identities of their fellow guests. Results showed several advantages of CMC, among which were no distracting accents and less time pressure. Freiermuch (2001) compared text chat and face-to-face conversation scripts between NNSs and NSs. Results showed that language learners contribute more often online, feel more comfortable contributing, and are less concerned about any language deficiencies that might cause them to refrain from speaking in a face-to-face conversation.
Negotiated Interaction in Synchronous Text Chat and Videoconferencing

Text-based CMC and videoconferencing are both synchronous instruction and communication methods in SLA. The advantage of synchronous instruction and interaction is that communication occurs in real time and therefore prepares learners to communicate in real-life settings (YukselTurk, & Top, 2006). Web-based CMC programs make it possible for language learners, who would otherwise not find it easy to meet face-to-face, to communicate synchronously through text chat and videoconferencing, which are supported by Web-based software. As a result, real-time cross-cultural communications among language learners become possible through text chat and videoconferencing.

Meaning negotiation in synchronous text chat.

There is a growing body of research that investigates synchronous interaction in text chat. Research results suggest that real time CMC can increase learners’ noticing of their own linguistic mistakes (Lai & Zhao, 2006; Shekary & Tahiririan, 2006) and enhance learners’ focus on linguistic form (Pellettieri, 2000; Warschauer & Kern, 2000; Chapelle, 2001).

Several studies focus on learners’ negotiation of meaning in text-based CMC and face-to-face communication. Research results suggest that face-to-face communicative interaction induces and promotes negotiation of meaning in both NS-NS and NNS-NNS communications (Varonis & Gass, 1985; Gass, 1998; Long, 1985; Pica, 1994; Toyoda & Harrison, 2002; Bitchener’s 2004), and is facilitative to SLA. Research shows that, similar to face-to-face interaction, text-based CMC has the potential of inducing negotiation of
meaning when the communication is task based (Smith, 2003a) or when no specific communication tasks are given, since the difficulties in understanding each other among NNS could trigger negotiation of meaning (Toyoda & Harrison, 2002).

There are both similarities and differences in meaning negotiation between text-based CMC and face-to-face communication (Smith, 2003a; Kötter, 2003; Darhower, 2002; Lai & Zhao, 2006). Similar to face-to-face communication, text-based CMC provides learners with opportunities to experience receiving input, feedback, and producing output (Pelletieri, 2000; Lee, 2002b). Text-based CMC is also able to carry the social perspective of SLA by engaging learners to work collectively to improve intercultural competence and cultural awareness (O’Dowd, 2007; Zeiss & Isabelli-García, 2005; Ware, 2005) and achieve a performance that they typically cannot execute alone (Lee, 2002b). Text-based CMC is different from face-to-face communication because of its reduced sensory nature (Smith, 2001), which tends to compel learners to be more explicit in indicating understanding and nonunderstanding (Smith, 2004).

Although negotiation of meaning in text-based CMC environments. Smith (2003a) used the face-to-face negotiation model developed by Varonis and Gass (1985) to observe text-based CMC, and reported differences in turn taking and negotiation routines. Varonis and Gass (1985) noted that non-native speaker (NNS) negotiation episodes are comprised of three obligatory phases, trigger, indicator, response, and one optional phase reaction to response. Smith (2003a) suggested that negotiation of meaning in text-based CMC differs from the Varonis and Gass (1985) model in that there is a high occurrence of the reaction to response phase, which appears to be more
dynamic in text-based CMC, and learners tend to carry on negotiation routines well past
the reaction to response stage. The observed differences call for a new model of
computer-mediated negotiation, especially for NNS-NNS communication. Expanding
the Varonis and Gass’s model, Smith (2003a) developed a new model of negation for
text-based CMC, which contains two more phases, confirmation and reconfirmation,
after the reaction to response phase.

**Meaning negotiation in videoconferencing.**

Studies that explore the use of video conferencing in language classes include
Kötter, (2003); Kinginger (1998); Kinginger, Gourvès-Hayward, & Simpson (1999); Zähner,
Fauverge, & Wong (2000); Masanori & Kanji (2007); and Yamada & Akahori (2007).
Kinginger’s (1998) study of video conferencing interactions between French and
American students shows that video conferencing resembles face-to-face
communication in classroom settings and has pedagogical value in providing learners
access to the spoken form of the target language. Kinginger (1998) also indicated that
the stress of public speaking in a video conference environment might induce a new
form of language classroom anxiety. The recent study done by Masanori and Kanji
(2007) explains that in video conferencing, the interlocutor’s image has a main effect for
social presence as well as on some aspects of productive performance, and that the use
of voice has a significant effect on perceived consciousness of language learning in
communication, productive performance and consciousness of learning objectives.
Learners negotiate meaning in video conferencing, but videoconferencing appears to
require a writing tool shared by the participants, like a writing board, in order to maximize its potential. (Zähner, Fauverge, & Wong, 2000).

Yamada and Akahori (2007) compared four types of CMC activities: text-based chat with and without interlocutor’s image, videoconferencing, and audio conferencing. It was found that image of communication partners seem to play an important role in facilitating communication. Compared to the three other types, video conferencing sessions yielded the greatest average number of turns, grammatical errors, self-corrections, utterances in the native language, and interruptions. These findings suggested that video conferencing facilitates communicative language learning as it provokes a large amount of input and many other opportunities for meaning negotiation.

It is worth noting that when audio modes are involved in communication activities, pronunciation errors and heavy accents tend to become distracting. Jepson (2005) reported a comparison of the patterns of repair moves in synchronous text chat and voice chat. Qualitative data analysis showed that repair work in voice chats was often pronunciation-related. The author suggested further study on the value of NNS chat room interaction in regard to the distracting pronunciation errors and accents.

**Communication Strategies in Synchronous Text Chat and Videoconferencing**

Communication strategies (CSs) have been a subject of interest in the field of SLA research since the 1970s (Tarone, 1977). Research in CSs follow two major approaches: the cognitive approach and the discourse maintenance framework (Smith, 2003b). The concept of CSs is treated as cognitive processes involved in using the target language.
Following this line of thinking, Tarone et al. (1976) defined CSs as a system that learners use to express or decode meaning in the target language when the appropriate systematic target language rules are not yet formed. Tarone’s (1977) taxonomy from this approach includes five main categories: avoidance, paraphrase, conscious transfer, appeal for assistance, and mime.

The other approach focuses on the discourse maintenance techniques learners use during interactions in order to simplify the discourse and avoid communication problems (Ellis, 1994). Long (1983) defined communication strategies as discourse management tools and devices of conversation maintenance used by communication participants to avoid communicative breakdown. The discourse management techniques in Long’s (1983) study include limiting the amount and type of information conveyed, the use of questions, employing a “here and now” orientation, using confirmation checks, and using self repetition. These strategies are distinguished from tactics, which are used for dealing with trouble after it occurs (Smith, 2003b).

Smith (2003b) claimed that perhaps the most extensive series of studies into communication strategies were the Nijmegen project which was done throughout the 1980s and 1990s. According to Smith (2003b) the Nijmegen project approached communication strategies from a psycholinguistic perspective, with a concern on the so called compensatory strategies in order to explore the relationship between these strategies and learner proficiency. According to the Nijmegen group, when learners find that they lack the linguistic resources to express their intended message, they can give up and abandon the message or revise their original utterance. These are avoidance
and reduction strategies. Learners can also appeal for help in providing the missing information. Besides these two choices, learners can resort to a compensatory strategy. Smith (2003b) further explained the two types of compensatory strategies in the Nijmegen project, namely conceptual strategies and linguistic or code compensatory strategies. Conceptual strategies are used to manipulate the concept of the target referent in an effort to explain the item; linguistic or code compensatory strategies are used when learners manipulate their linguistic knowledge to make their intended meaning comprehensible.

**Communication strategies in synchronous text chat.**

Communication strategies learners use in text-based CMC appear to be similar to those used in face-to-face communication (Smith, 2003a; Smith, 2003b; Chun, 1994). Learners are able to use a variety of strategies in discourse modification to convey meaning when non-understanding occurs (as in Smith, 2003b; Peterson, 2006; Lee, 2002b). However, Smith (2003a) warns teachers that “it requires a leap of faith to assume that CMC interaction among learners occurs to the same degree and in the same fashion as face-to-face communication” (p. 39). The reason lies in CMC’s nature of featuring both written and oral language. Like oral communication, CMC encourages fluency rather than accuracy (Lee, 2002b). Beauvois (1992) described text-based chatting as conversation in slow motion since CMC interface allows learners to communicate in real-time at a slower speed. Other research studies describe text-based CMC as resembling in many ways the written mode of communication (see Smith, 2003a; Murray, 2000).
Even though text-based CMC has been proved to resemble both written and oral forms of communication, there has not been sufficient research on the differences of communication strategy use in CMC and those in either written or oral communications. Chun (1994) was considered the first researcher to study communicative strategy use during CMC from an interactionist perspective (Smith, 2003b). She found that CMC fostered topic initiation, topic expansion, clarification requests, confirmation and comprehension checks, and repair.

Lee (2002b) studied the types of modification devices used by NNSs through synchronous CMC. As interaction takes place in real time in synchronous CMC, Lee (2002b) believed that it was appropriate to use selected communication strategies found in face-to-face communication to analyze the interaction occurring in the synchronous CMC context. She found that learners used communication devices similar to those used in face-to-face interaction, and confirmed that interactive strategies facilitate comprehension of input and output. As a suggestion for future research, she pointed out that a comparison of the negotiation strategies used by learners who interact with each other via online with those who communicate through face-to-face conversation is needed.

Smith (2003b) continued the line of research on communication strategy use in task-based CMC. Findings suggested that learners are able to use a wide array of communication strategies during task-based CMC and the CMC environment shapes this use. Smith (2003b) reported that learners displayed an especially high use of certain pragmatic, discourse, and paralinguistic strategies while engaged in CMC.
communication. Since “non- and para-linguistic cues such as eye gaze, nods, intonation, and pitch used in spoken discourse to communicate meaning, signal a transfer of the floor, or indicate an end of one topic or beginning of another are absent in CMC exchanges”, learners must use “text-based surrogates” (Smith, 2003b, p. 44). The most frequently used strategies include framing, which is an attempt to clearly mark the end of old topics or the beginning of new ones; and fillers, which are gambits used to fill pauses, and time-gaining strategies to maintain conversation in time of difficulty.

Communication strategy in videoconferencing.

Studies addressing communication strategy use in videoconferencing are very rare. One possible reason is that videoconferencing resembles face-to-face communication as it provides audio and video cues. However, as mentioned earlier, negotiation of meaning in videoconferencing and face-to-face communication appears to be different, and it may not be reasonable to assume learners use similar strategy in videoconferencing as in face-to-face communication.

Research Environment and Task Type

Research on SLA is conducted in various environments, including at a laboratory, through structured instruction, and in authentic environments (Hegelheimer & Tower, 2004). Hegelheimer and Tower (2004) summarized the definitions of the various environments. Laboratory research refers to class or private language learning environments designed solely for research, where the researchers use artificial or pseudo language to study acquisition or structure of language, controlling prior knowledge. Structured instruction happens in unnatural settings or settings that would
not occur without the researcher having influenced the activity of the learner. The researcher usually uses natural or slightly modified language in the structured situation. Authentic environments refer to learning situations where activities are not designed beforehand or adjusted in the process for the purpose of research. The researcher has little or no influence on learners’ activities throughout the learning process.

Among the three different research environments, authentic environments are supposed to enhance external validity, which defined by Chapelle and Jamieson (1991, p. 38) as “the applicability of research results to instructional and research contexts other than the one in that the research was carried out”. CMC offers opportunities for learners to communicate in authentic settings and therefore understand how the L2 is used in real life. However, empirical research in CMC is usually conducted in laboratory settings or through structured observation (Hegelheimer & Tower, 2004; Chapelle & Jamieson, 1991). There is a need to explore CMC activities in authentic settings.

Similar to research environment, task type is another important aspect in SLA research. Research on classroom tasks tends to focus on the definition and typology of tasks, implementation issues of tasks, and the relationship of task use to L2 acquisition (Fidalgo-Eick, 2001). Tasks are defined differently depending on the theoretical backgrounds and pedagogical purposes of the researchers. Gass (1977) defined tasks as work that needs to be accomplished. Skehan (1996) defined tasks as meaningful activities. Moss (2003) noted that tasks provide learners opportunities to interact with other learners and encourage authentic use of language and meaningful communication. Nuan’s (1989, p. 10) well-cited definition of tasks emphasizes meaning exchange in a
task, where task is “a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form.” Pica et al. (1993) claimed that several task types are related to the Interaction Hypothesis, for example, jigsaw, information gap, problem solving, decision making, and opinion exchange.

Beauvois (1992) studied another form of task—free discussion. Free discussion focuses on the content of opinion exchange and how learners express their opinions. Oscoz (2003) defined free discussion as activities in which learners converse about a reading or class topic in the online environment. Lexical goals are not explicitly expected. Free discussion has been used in some CMC research and proven to be beneficial as it helps to minimize the affective filter, create a less stressful environment, and therefore increase student participation (as in Beauvois, 1992; Kelm, 1992, and Chun 1994).

**Summary of Literature**

Most of the reviewed studies focus on the advantages of CMC from a social constructive perspective and regard CMC as a meaningful tool in facilitating interaction between NSs and NNSs as well as among NNSs. Long’s (1985, 1996) Interaction Hypothesis claims that comprehensible input is a result of meaning negotiation, which promotes SLA as learners work together to understand and express meaning in L2. This research is undertaken within the framework of the Interaction Hypothesis.

The review of literature demonstrates that CMC facilitates negotiation of meaning, especially in task-based activities, and therefore may promote SLA. Text chat
and videoconferencing are two popular modes of CMC activities. In text chat, learners are found to negotiate meaning in a way that resembles face-to-face communication, yet text chat possesses unique characteristics because of its written nature. Learners use various communication strategies during text chat to simplify the discourse and avoid communication problems. Videoconferencing, as a relatively new mode of CMC, is believed to more closely resemble face-to-face communication. The modest amount of research on videoconferencing suggests that meaning negotiation happens in videoconferencing as well, but may not be the same as in text chat or face-to-face communication.

Currently very few studies attempt to explicitly compare text chat and videoconferencing to understand meaning negotiation and communication strategy use in these two modes of CMC, especially in authentic environments with free discussion tasks. More CMC research focuses on jigsaw or decision-making tasks with lexical goals, following Pica et al.’s (1993) task typology. Pica et al (1993) cited two features of all discussion tasks. First, all tasks are oriented towards goals. Second, participants should take an active part in the activity. Jigsaw and decision-making tasks with lexical goals are based on Pica et al (1993) typology, but they are essentially pedagogical in nature and lack real-world authenticity (Smith, 2003).

Different from this view, Long (1985, 1996) pointed out that learners acquire language rules through interaction with native speakers and other language learners, but not through practicing language forms and grammatical structures during conversation. Learners tend to overlook language form and grammatical structures in
CMC communications. Recent research proves that it is not easy for learners to provide corrective feedback and to attend to linguistic errors during CMC, and corrective feedback only occurs when explicitly required (see Ware & O’Dowd, 2008; Lee, 2008). Interaction activities that are rigidly designed to practice certain grammatical rules do not seem to fit in the context of cross-cultural CMC, compared to open-ended culture-related discussions. CMC’s capacity of connecting learners globally appears to urge SLA to be more learner-centered in virtual classrooms than in traditional classrooms.

The lack of studies on these pertinent issues constitutes the gap in SLA research that this study seeks to address. This study investigates the following:

1. How do negotiation routines in text chat compare to those in video conferencing?
2. How do communication strategies NNS use in text chat compare to those found in videoconferencing?
3. How do text chat and videoconferencing shape meaning negotiation and the use of communication strategies?
4. What should teachers know about meaning negotiation and communication strategy use in text chat and videoconferencing in order to improve SLA teaching and learning with technology?
CHAPTER III

METHODOLOGY

Few studies have explicitly compared text chat and videoconferencing to understand meaning negotiation and communication strategy use. This study explored the similarities and differences between text chat and videoconferencing from a pedagogical perspective.

Following up on the pilot study, the current study investigated the negotiation of meaning between NNS in text chat and videoconferencing. Communication strategies are closely related to meaning negotiation, yet have not been thoroughly studied, especially in videoconferencing. As such, this study also aimed at analyzing the communication strategies NNS employ during text chat and videoconferencing.

Research Questions

This study considered the following research questions:

1. How do negotiation routines in text chat compare to those in videoconferencing?

2. How do communication strategies NNS use in text chat compare to those found in videoconferencing?

3. How do text chat and videoconferencing shape meaning negotiation and the use of communication strategies?

4. What should teachers know about meaning negotiation and communication strategy use in text chat and videoconferencing in order to improve L2 teaching and learning with technology?
Site of Data Collection and Setting

This study was conducted with students from a public university in Beijing, China, and a private university in Tokyo, Japan. An elective course named Cross Cultural Distance Learning (CCDL) has been offered in English at both universities since September 2002. The course is co-taught by Chinese and Japanese instructors residing in China and Japan, and follows a shared curriculum that aims at promoting cultural awareness and cross-cultural communication strategy use as well as English language proficiency. Every week, students taking the course participate in both synchronous text-based chat and video conferencing to discuss culture-related issues using English as the common language. A final paper on one particular culture-related issue and an oral report of the final paper are part of the class requirements.

Participants

In Spring 2009, 26 students in China and 24 in Japan enrolled in the CCDL course. Table 1 below is a detailed description of the participants.
Table 1

*Information of the Participants*

<table>
<thead>
<tr>
<th></th>
<th>Chinese Group (CG)</th>
<th>Japanese Group (JP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country of Residence</strong></td>
<td>China</td>
<td>Japan</td>
</tr>
<tr>
<td><strong>Native Language</strong></td>
<td>Chinese</td>
<td>Japanese</td>
</tr>
<tr>
<td><strong>Number of Members</strong></td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>18-20 (M=19.02)</td>
<td>18-24 (M=21.22)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>26 females</td>
<td>20 males, 4 females</td>
</tr>
<tr>
<td><strong>Major of Study</strong></td>
<td>English Education</td>
<td>Politics and Economics</td>
</tr>
<tr>
<td><strong>Years of Learning English</strong></td>
<td>6-9 years</td>
<td>6-9 years</td>
</tr>
<tr>
<td><strong>English Language Proficiency</strong></td>
<td>High Intermediate</td>
<td>High Intermediate</td>
</tr>
<tr>
<td><strong>Previous Experience with Computers</strong></td>
<td>1-6 Years</td>
<td>2-6 Years</td>
</tr>
</tbody>
</table>

All the Chinese and the Japanese students began learning English in the first year of junior high school. For both groups of students, English has been taught as a subject in school, but not used outside the classroom. Both the Chinese and the Japanese students are currently taking classes in English conversation every week with native English speakers. A few students on both the Chinese and the Japanese sides have travelled to English-speaking countries for short visits, but none of the students have spent more than one month in an English speaking country. Several students on both sides claim to have native English-speaking friends. Based on scores of the college entrance examinations at the Chinese university, which is roughly comparable to the
standardized exam TOEFL (Test of English as a Foreign Language) that overseas students take in order to enter American universities, the Chinese participants are considered to be high-intermediate in English language proficiency. The Japanese university does not provide official exam scores. Based on the personal evaluation of the Japanese professor co-teaching the CCDL course, the English proficiency level of the Japanese participants is also considered to be high-intermediate.

**Procedures**

For each text chat and videoconference, 10 participants were expected, 5 as a group in each country. The text chats and videoconferences were held outside class hours, using students’ spare time. The actual number of participants at the text chats and videoconferences varied. Participants in China and Japan met every week for three text chat sessions and three videoconferencing sessions, both of which were roughly one hour in length. Between June 22nd and July 17th, 12 text chats and 12 videoconferences were held. Groups of participants were arranged in a way that each group would meet with the same partner group for both the text chat and videoconferencing sessions, which were not held on the same day because of facility availability. Table 2 shows the schedule and the actual number of students participating at each text chat and videoconference. Each Chinese group (CG) was matched with a Japanese group (JP) according to their pre-decided topics and time availability.

According to this schedule, CG1 had two text chats and two videoconferences during the semester. The partner groups for CG1 were JG1 and JG6. CG1 had the first text chat session with JG6, and then another text chat with JG1. CG1 talked about the
same topic and used the same materials in the two text chats. The conversations were different because of the different partners CG1 met. CG1 met with JG1 and JG6 again later in the videoconferences. Even though the topics were supposed to be consistent in both the text chats and the videoconferences, the conversations were different because of the differences in the communication modes.

Table 2

Schedule of Text Chats and Videoconferences

<table>
<thead>
<tr>
<th>Date</th>
<th>Text Chat</th>
<th>Videoconferencing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Groups (Number of Participants)</td>
<td>Groups (Number of Participants)</td>
</tr>
<tr>
<td>June 23rd</td>
<td>CG 1 (5) with JG 6 (4)</td>
<td>CG 6 (4) with JG 1 (4)</td>
</tr>
<tr>
<td>June 24th</td>
<td>CG 1 (4) with JG 1 (5)</td>
<td>CG 6 (4) with JG 6 (3)</td>
</tr>
<tr>
<td>June 26th</td>
<td>CG 2 (5) with JG 5 (4)</td>
<td>CG 5 (5) with JG 2 (7)</td>
</tr>
<tr>
<td>June 30th</td>
<td>CG 2 (4) with JG 2 (7)</td>
<td>CG 5 (5) with JG 5 (3)</td>
</tr>
<tr>
<td>July 1st</td>
<td>CG 3 (5) with JG 4 (3)</td>
<td>CG 4 (6) with JG 3 (7)</td>
</tr>
<tr>
<td>July 3rd</td>
<td>CG 3 (5) with JG 3 (6)</td>
<td>CG 4 (5) with JG 4 (5)</td>
</tr>
<tr>
<td>July 7th</td>
<td>CG 4 (6) with JG 3 (4)</td>
<td>CG 3 (6) with JG 4 (5)</td>
</tr>
<tr>
<td>July 8th</td>
<td>CG 4 (5) with JG 4 (3)</td>
<td>CG 3 (7) with JG 3 (6)</td>
</tr>
<tr>
<td>July 10th</td>
<td>CG 5 (5) with JG 2 (5)</td>
<td>CG 2 (5) with JG 5 (4)</td>
</tr>
<tr>
<td>July 14th</td>
<td>CG 5 (5) with JG 5 (7)</td>
<td>CG 2 (5) with JG 2 (4)</td>
</tr>
<tr>
<td>July 15th</td>
<td>CG 6 (6) with JG 1 (6)</td>
<td>CG 1 (5) with JG 6 (6)</td>
</tr>
<tr>
<td>July 17th</td>
<td>CG 6 (6) with JG 6 (5)</td>
<td>CG 1 (6) with JG 1 (5)</td>
</tr>
</tbody>
</table>
Topics for text chat and videoconferencing were chosen by the participants. As shown in the pilot study, participants in both China and Japan tended to favor topics like youth culture, campus life, popular music, etc.. The participants were required to research the topics before class and present briefly on the topic at the beginning of the text chats and videoconferences. Following the required presentation, participants were encouraged to raise questions and discuss the presented topic. Topics other than the presented one might also be discussed.

The synchronous text-based chatting was mediated through a software program named CUSeeMe, which allows video and audio communications. In this study, we restricted the use of CUSeeMe to text chat only in order to compare communication in text chat sessions with that in video conferencing. When chatting began, participants entered their pre-assigned virtual chat rooms, where they “met” with other members in the same country, and members of the partner group from the other country. Figure 2 is a computer screen capture of the virtual text chat room.

![Image of text chat screen capture]

Figure 2. Text Chat Screen Capture
The videoconferences were mediated through the Polycom Video Conference System. This system allowed participants to view participants from the other country and at the same time see themselves in one corner of the same television screen. The instructor could change the angle and the scope of the video camera to capture and focus on particular participants, or switch the mode of the television to display a PowerPoint document or show any other artifacts that the students wanted to share. As a result, participants might temporarily not be able to view the image of a speaker but could still hear the voice. Figure 3 is a photo of the television screen while a videoconference was held during the pilot study. The photo was taken from the Chinese side, participants shown in the upper left corner are Chinese students and the others are Japanese students.

Figure 3. Videoconferencing Screen Capture
For the purpose of data triangulation, as a research instrument, a survey on communication strategy use in text chat and videoconferencing was carried out at the end of the semester. The survey contained 10 statements written in English, as shown in Appendix IV. Participants were asked to pick the most relevant response to each statement. The survey statements were created out of the communication strategies that this research aimed to investigate (Smith, 2003b). However, some communication strategies, like message abandonment and inferential strategy which will be discussed later in this chapter, were difficult to measure. The survey only covered five strategies that both the researcher and the Japanese co-teacher agreed to be appropriate to match the English proficiency and comprehension level of the participants.

**Script Collection and Discourse Analysis**

When registering for the class, all students gave permission to the researcher to observe the text chat and the videoconferencing, save the text chat logs, and record and transcribe the videoconferencing. Pseudonyms were used to protect participants’ identities.

Immediately after each text chat, the instructor checked with every student that s/he saved the chat logs before turning off the computer. All chat logs would then be collected and coded in part using the *completat lexical tutor* ([http://132.208.224.131/](http://132.208.224.131/)) online text analysis tool (Sevier, 2004), which is a tool to count lines and turns. No changes were made to the text chat scripts during the coding process. Spelling mistakes and errors were kept as they were. Turns were counted according to the transfers of “floors” among participants. Text chat discourse was different from face to face
conversation in that potential speakers did not have access to the same channel at once, and the discourse was one way in nature (Smith, 2003a). Counting the “floors” appeared to be a more appropriate method than simply counting the lines. The following example shows how turns were counted in a text chat episode:

Text Chat Excerpt 1:

1. Japanese Participant 1(J1): What major you take?
2. Chinese Participant 1 (C1): I major in English Education.

   C1: What about you?
4. C1: How do you think your major?
5. J1: I think economics is difficult but interesting.

   J1: Is English Education interesting?

In Text Chat Excerpt 1, 5 turns were counted instead of 7, which is the number of lines. A turn was counted only when there was a change of “floor” but not when participants started a new line by clicking the *Enter* key.

Videoconferences were recorded using a regular home video recorder. The researcher transcribed the videoconferences using a simplified version of orthographic transcription techniques developed by Sacks et al. (1974). Turns were counted according to the turn-taking concepts conceived by Sack et al. (1974), which was designed for face-to-face discourse analysis. The following example shows how a videoconferencing episode is coded:
Videoconferencing Excerpt 1:

1. C5: baseball is not very popular in China...football...soccer...is popular in China.
2. J4: soccer...many young girls like soccer because of ([waud ga]) (3)
   ((Chinese participants talk in low voice among themselves.))
3. C5: what?
5. C5: oh...world cup.
6. C1: oh...I see...world cup.
   ((Both sides laugh.))

In this excerpt, 6 turns were counted. The researcher used the International Phonetic Alphabet (IPA) to record the sounds when there was trouble understanding the meaning. For example, J4 mentioned ([waud ga]), which was noted with IPA and put in parenthesis because it was hard to recognize. According to the conversation transcribing method developed by Sack et al. (1974), notable pauses should be recorded in seconds, and non-verbal interactions among the participants should also be described. There was a 3 second pause, marked with (3), after J4’s comment on ([waud ga]), and the nonverbal response of the Chinese learners was described and marked with double parenthesis. The transcription guideline is attached to the dissertation.

Negotiation of meaning in both text chat and videoconferencing was analyzed and compared by the researcher using a simplified version of Smith’s (2003a) model as displayed in Figure 3. Smith (2003a)’s model was based upon the typical schema
introduced by Varonis and Gass (1985), who noted that negotiation episodes are responses to instances of nonunderstanding during NNS-NNS interaction. Each negotiation episode consists of three obligatory phases: trigger <T>, indicator <I>, reaction <R>, and one optional phase: reaction to response <RR>. Smith (2003a) broke down the four component parts of the negotiation routines in the Varonis and Gass (1985) model into subcategories in order to answer the question of whether learners negotiate for meaning when problems in communication arise in task-based CMC and to characterize the nature of such negotiation.

In Smith’s (2003a) expanded model, the trigger <T> is divided into four subcategories: lexical, syntactic, discourse, and content to further classify problems that initiate a negotiation routine. Each indicator <I> is classified as global, local, or inferential. An utterance in reply to an indicator of nonunderstanding is response <R>, which is categorized as minimal, repeating the trigger with lexical modification, and rephrasing and elaborating in Smith’s (2003a) model. The optional reaction to response <RR> phase may consist of an explicit statement of understanding, which is classified as minimal, or a comment on the cause of the problem named metalinguistic talk.

Smith (2003a) found that the reaction to response <RR> phase of computer-mediated negotiation routines appeared to be more dynamic than previously reported, and his data showed a strong tendency for learners to carry on negotiation routines well past the reaction to response <RR> stage. Smith (2003a) identified two additional phases of CMC negotiation routine and referred to them as the confirmation <C> and reconfirmation <RC> phases.

Based on Smith’s (2003) model, for this research, the researcher designed a similar model to measure meaning negotiation in both text chat and videoconferencing, as shown in Figure 4.
Figure 5. Meaning Negotiation Model for Current Study

This framework was used to analyze both text chat and videoconferencing. As shown in the framework, meaning negotiation began with a trigger of nonunderstanding and was indicated by an indicator. The learner who caused the nonunderstanding might choose to respond to the indicator by providing a response, which could lead to a reaction to response, confirmation, and reconfirmation. Negotiation might end at the indicator stage if nonunderstanding was not picked up, or at the response stage if the problem was quickly resolved. In that case, negotiation
might continue to the confirmation and reconfirmation stage if the interlocutors chose
to do so. Example 1 taken from the pilot study demonstrated the complete process of
meaning negotiation in text chat. This process is the same in text chat and
videoconferencing.

Example 1

C1: Most the boys like her, but the girls don’t like her any more.

(7 lines of text)

<T>  J1: Is it jeurous?

<I>  C1: what do you mean?

(1 line of text)

<R>  J1: jealousy

J1: Sorry.

J1: I was wrong.

<RR>  C1: you mean girls are jealousy about her?

<C>  J1: Yes.

<RC>  C1: Okay.

C1: maybe.

In the example above, Chinese learner C1 told her Japanese partner J1 that
girls in China did not like a certain movie star. Since the topic was intertwined with
other topics, 7 lines of unrelated texts had passed before J1 made a comment “Is it
jeurous?” J1 misspelled the word “jealousy,” which was the trigger of nonunderstanding.
The indicator was the question “What do you mean?” As a response, J1 corrected the
spelling error. C1’s question, “You mean girls are jealousy about her?” served as the reaction to response and was confirmed by J1 with a “Yes,” which was the confirmation.

To wrap up the negotiation on the word jealousy, C1 said “Okay” as the reaction to confirmation, and then C1 moved back to the discussion about the movie star.

If the response could not resolve nonunderstanding, it might trigger a negative reaction to response, and then another round of meaning negotiation starting with a new response. The negotiation continued until nonunderstanding was resolved or the learners chose to stop the negotiation. This happened in both text chat and videoconferencing. Example 2, found in the text chat data of the pilot study, showed how an unsuccessful response causes another round of meaning negotiation.

Example 2

<T> J1: Is there animation movies that made from China? And who like to see animation movies in China?

(1 line of text)

<I> C1: I don’ understand the word “animation movies”.

(2 lines of text)

<R> J1: I mean the animation movies are the animation films you see in the theater.

(1 line of text)

<RR> C1: I don’t like movies that are always fighting.

<R> J1: Animation movies are not always fighting.

<RR> C1: I don’t know... I don’t often go to theaters.
J1: Me too!

C1: Tickets are expensive.

J1: Yeah. You rent DVDs?

C1: I always rent DVDs.

J1: I also often watch DVD. You like watch with friends or watch alone?

In Example 2, the word animation triggered nonunderstanding. J1 apparently failed to successfully explain the word at the response stage, and in reaction to response, C1 seemed to relate animation movies to action movies. The negotiation then returned to the response stage as J1 tried to further explain that animation movies are not always fighting. At the following reaction to response stage, C1 told J1 she still did not understand. However, negotiation on the word animation ended here as the topic drifts away.

Communication strategies in both text chat and videoconferencing were coded and compared based on the coding categories developed by Smith (2003b). Smith (2003b) created a list of 14 strategy categories to code text chat scripts, but not videoconferencing. Out of the 14 strategies, 3 strategies were not found in the text chat scripts during the pilot study and were therefore not used in the current study. Except for those 3, the other 11 strategies from Smith (2003b) were adapted in order to code both text chat and videoconferencing scripts in this study. The communication strategy types analyzed in this study are listed below.

1. Framing (F): marking the closure of old topics and the initiation of new ones. For example, participants in both text chat and videoconferencing
2. Tone (T): using polite or rude formulations of language to express
   politeness or dissatisfaction, or using indirect language to express subtle
   feelings.
3. Paralinguistic strategies (P): using non-verbal expressions in text chat and
   videoconferencing. In text chat, emoticons, capital letters, punctuations,
   and word substitutions (u=you, 2=too/to, ic=I see) were used to express
   pitch and intonation or stress, surprise, etc. In videoconferencing,
   gestures and body movements were used to express meanings.
   Onomatopoeia was used in both text chat and videoconferencing.
4. Message abandonment (MA): giving up a topic when it was too difficult
   to express. For example, “I can’t understand. Let’s talk about something
   else.” “I don’t know, I don’t understand politics, can we talk about
   movies?”
5. Code switching (CS): using L1 words or expressions without translating
   them to resemble the morphology of L2. For example, “Do you know
   千语千寻?”
6. Code switching to assist meaning expression (CSA): using L1 words or
   expressions to assist learning the corresponding words or expression in
   L2. For example, “猫 pronounced like MAO, it means cats in English”.

used “Good”, “OK”, “Fine”, “Yes”, etc. to mark the ending of an old topic
or turn, and the readiness to start a new one.
7. Self-correction and self-rephrasing (SC): correcting oneself when errors occurred. For example, in text chat: “I will send you lots of male”; “sorry, I mean mail”.

8. Comprehension check (CC): asking respondent whether s/he has understood in order to maintain smooth communication. General questions are used to check understanding. For example, “Do you understand?” “Do you know?” “Did you hear me?”

9. Inferential strategies (I): asking and commenting on specific parts of the preceding discourse or asking questions using established information to test understanding. For example, “Did you mean firework?” “Did you want to ask me about Chinese dumplings?”

10. Using of fillers (F): using gambits to fill pauses. For example, in time of difficulty, using “Well...” “Let's see...” etc.

11. Appeal for assistance (before non-understanding occurred) (AA): directly or indirectly asking for help.

The text chat and videoconferencing scripts were analyzed through discourse analysis. As mentioned before, turns of meaning negotiation were counted using the framework developed by Varonis and Gass (1985) and updated by Smith (2003a). A ratio of negotiated turns to total turns was calculated and compared between the two different modes. Negotiated turns were signs of meaning negotiation during the conversation. As described by Varonis and Gass (1985), learners need to “push down” in the conversation, or “pop out” from it, to negotiate meaning when there is an explicit
indication of nonunderstanding. The comparison of negotiated turns in text chat and videoconferencing established a ratio of meaning negotiation in the two modes, which is important to understand the pedagogical significances of text chat and videoconferencing from Long’s (1985, 1996) IH perspective.

Cases of the use of communication strategies were counted according the strategy types listed above. The most frequently used strategies in the two modes were compared. Through the investigation of the communication strategies learners used, it was possible to examine how learners avoid and overcome communication difficulty in text chat and videoconferencing, and how the different modes shape learners’ choice of strategy use.

**Analysis of Survey Results**

In the survey, there were five questions concerning text chat and five questions concerning videoconferencing. The text chat questions corresponded with the videoconferencing questions. For example, a text chat question asked learners’ opinions on using non-verbal expressions, like emoticons, during a chat meeting, the corresponding videoconferencing question asked about using gestures and body movements in a videoconference. The two questions tested the use of Paralinguistic Strategy in text chat and videoconferencing. Students answered each survey question by choosing one of the following answers: strongly disagree, disagree, agree, or strongly agree. The percentage of each answer was described.
CHAPTER IV

ANALYSIS

Meaning Negotiation in Text Chat

The approximately 12 hours of text chat sessions yielded a script of 26,182 running words. Negotiation of meaning in text chat was analyzed using the framework adapted from the expanded model of computer-mediated negotiation developed by Smith (2003a). As explained in Chapter 3 with Example 1 and Example 2, meaning negotiation in both text chat and videoconferencing may go through 6 phases: trigger <T>, indicator <I>, reaction <R>, A reaction to response <RR>, confirmation <C>, and reconfirmation <RC>, and it may end at any stage after trigger <T>. Each round of meaning negotiation containing the 6 or less than 6 phases is named an episode. There are a total of 36 negotiation episodes found in the text chat script of 26,182 running words. Within an episode, turns that represent the phases are negotiated turns. As shown in Example 1, which is an episode of meaning negotiation, there are 6 negotiated turns, each marked out with the initial of the phase name. Since there were several learners participating at this text chat and the topics were intertwined, unrelated topics
are omitted, and the number of the omitted text lines is listed in parenthesis. Scripts are used as they are, with spelling errors and punctuations unchanged.

Example 1:

C1: Most the boys like her, but the girls don’t like her any more.

(7 lines of text)

<T> J1: Is it jerousy?

<I> C1: what do you mean?

(1 line of text)

<R> J1: jealousy

J1: Sorry.

J1: I was wrong.

<RR> C1: you mean girls are jealousy about her?

<C> J1: Yes.

<RC> C1: Ok.

C1: Ok.

C1: maybe.

In order to answer whether NNS-NNS negotiation of meaning occurs during synchronous text chat, the total turns and negotiated turns in the text chat logs were calculated. Table 3 shows the number of total turns and negotiated turns in the text chat data set. Out of 2,921 total turns in text chat logs, 150 turns or 5.14% were negotiated turns. Apparently negotiation of meaning occurs in text chat.
Table 3

*Total Turns and Negotiated Turns in Text Chat*

<table>
<thead>
<tr>
<th>Media</th>
<th>Total Words</th>
<th>Total Turns</th>
<th>Negotiated Turns</th>
<th>Mean Percentage of Negotiated Turns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text Chat</td>
<td>26,182</td>
<td>2,921</td>
<td>150</td>
<td>5.14%</td>
</tr>
</tbody>
</table>

It is important to see how negotiation of meaning was carried out i.e. what stages negotiation of meaning consists of in text chat. In this study, text chats yielded a total of 36 episodes of meaning negotiation. Table 4 shows the various stages of negotiation that occurred in text chat logs.

Table 4

*Stages of Negotiated Episodes Completed by Dyads in Text Chat*

<table>
<thead>
<tr>
<th>Cases of Meaning Negotiation</th>
<th>Total Number (Relative Percentage of Episodes Terminating at This Stage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T I</td>
<td>8 (22.22%)</td>
</tr>
<tr>
<td>T I R</td>
<td>17 (47.22%)</td>
</tr>
<tr>
<td>T I R RR</td>
<td>11 (30.56%)</td>
</tr>
<tr>
<td>T I R RR C</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>T I R RR C RC</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>36 (100%)</td>
</tr>
</tbody>
</table>

Note: T= Trigger; I= Indicator; R=Response; RR= Reaction to the Response; C= Confirmation; RC= Reaction to Confirmation
In text chat, 22.22% of negotiation routines consisted of only a trigger and an indicator. That is, a trigger caused nonunderstanding, but the indicator of nonunderstanding was disregarded. Nonunderstanding is different from misunderstanding. Nonunderstanding happens when learners have trouble understanding a remark, but not making false inferences based on the remark as in misunderstanding. In the following example, two learners, J1 and C2, are discussing rock music, while C2 is also talking with other learners in the group about Chinese poems. In the intertwined discussion, C2 tries to respond to both topics, yet the indicator of nonunderstanding from J1 is neglected. As a result, this episode of meaning negotiation consists of only a trigger and an indicator.

Text Chat Excerpt 2: Negotiation Ending with Indicator

J1: How about Rock?

C1: Have you heard of “Su Shi”, a Chinese poet, I like him very much.

<T> C2: A little noisy I think.

C2: Yes, he is very famous.

C2: and he wrote many poems.

C2: Yes.

J2: We Japanese people learn their writing in junior high school and high school!!!

<l> J1: Noisy? I cannot understand what you mean.

J1: But I like lol.

C2: I often go to sing songs with my friends on weekends.
According to Varonis and Gass’s (1985) and Smith’s (2003a) models, a complete negotiation episode consists of at least a trigger, an indicator, and a response. In this study, 47.22% of all signals of nonunderstanding in text chat were followed through by a complete negotiation episode. That is, the indicator of nonunderstanding was noticed and responded to. Text Chat Excerpt 3 is an example of a complete negotiation episode in text chat.

Text Chat Excerpt 3: Negotiation Ending with Response

<T>  J1: The difference of nature between Japanese and Chinese.

<I>  C1: What do you mean by nature?

      C1: by

      C1: the scenery?

      (8 lines of text)

<R>  J2: I guess he meant difference of natural character.

In the conversation above, J1 and J2 tried to talk with C1 about characteristics of Chinese and Japanese people. C1 was puzzled by the word nature, and indicated the problem directly. J2 responded by explaining the meaning of the word. It is worth noting that C1 corrected his own spelling mistake and used inferential strategy to find out the meaning of nature in the conversation by asking the scenery? The use of conversational strategies will be discussed later in this chapter.

Smith (2003a) suggested that in a CMC environment, learners tend to bring the negotiation routine to some explicit closure and he found a high occurrence of the reaction to the response (RR) phase. In this study, the text chat negotiation with four
stages completed reached 30.56%, which is much less when compared to Smith’s (2003a) findings of 82%. The difference is possibly related to the fact that the design of the current study is not strictly task-based, where the focus usually is on lexical recognition and retention. In this study the open-ended discussions with a focus on cultural exchange did not seem to compel learners to come to a highly explicit closure as in task-based activities. The RR phase can be either positive or negative. A positive RR (RR+) is an explicit or implicit indicator of understanding, while a negative RR (RR-) is an explicit or implicit indicator of nonunderstanding. With a negative RR, the meaning negotiation usually continues until the nonunderstanding was resolved. The following excerpt is an example of meaning negotiation with a positive RR.

Text Chat Excerpt 4: Negotiation Ending with Positive Reaction to Response

<T> J1: yeah, I think so. They are just the first two places I will go.

(4 lines of text)

<I> C1: Two places?

C1: Beijing and?

<R> J1: I mean Tokyo and Kyoto.

<RR+> C1: I see.

In Text Chat Excerpt 4, C1 was not able to understand which two places J1 planned to visit. Getting the answer, C1 explicitly indicated understanding with “I see”, which is a positive RR. When the response to nonunderstanding is not satisfactory, it may trigger a negative RR as in the following excerpt.
Text Chat Excerpt 5: Negotiation Containing Negative Reaction to Response

<T> J1: High school musical...

<I> C1: You mean musical instrument?

<R> J1: nono.

J1: Musical play.

<RR-> C1: You mean concert?

<R> J1: a kind of...

J1: Hmm

J1: On stage, they also act, dance, sing...

C1: Oh I like it very much, too.

In this excerpt, C1 did not understand musical and musical play. Using inferential strategy, C1 gave a negative RR You mean concert, which triggered another response “on stage, they also act, dance, sing...”. This response successfully solved the nonunderstanding as C1 implied that she knew and liked musical plays.

In the text chat scripts, the two additional negotiation phases, confirmation and reconfirmation were not found.

Meaning Negotiation in Videoconferencing

The roughly 12 hours of videoconferencing yielded a script of 33,062 running words. Same as in text chat, learners negotiated meaning in videoconferencing. Table 5 shows the total turns and negotiated turns in the videoconferences. Out of a total of 3,090 turns, 876 are negotiated turns, reaching 28.35%.
Table 5

*Total Turns and Negotiated Turns in Videoconferencing*

<table>
<thead>
<tr>
<th>Media</th>
<th>Total Words</th>
<th>Total Turns</th>
<th>Negotiated Turns</th>
<th>Mean Percentage of Negotiated Turns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videoconferencing</td>
<td>33,062</td>
<td>3,090</td>
<td>876</td>
<td>28.35%</td>
</tr>
</tbody>
</table>

Table 6 shows the breakdown of the negotiation episodes in videoconferencing. In this study, videoconferencing yielded a total of 206 episodes of meaning negotiation, terminating at various stages.

Table 6

*Stages of Negotiation Episodes Completed by Dyads in Videoconferencing*

<table>
<thead>
<tr>
<th>Cases of Meaning Negotiation</th>
<th>Total Number (Relative Percentage of Episodes Terminating at This Stage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T  I</td>
<td>11 (5.34%)</td>
</tr>
<tr>
<td>T  I  R</td>
<td>93 (45.15%)</td>
</tr>
<tr>
<td>T  I  R  RR</td>
<td>80 (38.83%)</td>
</tr>
<tr>
<td>T  I  R  RR  C</td>
<td>16 (7.77%)</td>
</tr>
<tr>
<td>T  I  R  RR  C  RC</td>
<td>6 (2.91%)</td>
</tr>
<tr>
<td>Total</td>
<td>206 (100%)</td>
</tr>
</tbody>
</table>

Note: T= Trigger; I= Indicator; R=Response; RR= Reaction to the Response; C= Confirmation; RC= Reaction to Confirmation
Out of a total of 206 episodes of meaning negotiation, 11 cases, or 5.34%, consist of only a trigger and an indicator. In those cases, the indicator of nonunderstanding was unidentified and lost in the fast flow of the oral conversation. In the following excerpt, W5’s statement was not recognizable, and C1 asked for explanation after 3 seconds of silence. Her request was neglected while W5 went on with the conversation. C1 was puzzled again very soon, but her nonunderstanding was not noticed for the second time.

Videoconferencing Excerpt 2: Negotiation Ending with Indicator

<T1> W5: I’m ((talk not recognizable)) at university.

     (3.0)

<I1> C1: Pardon?

<T2> W5: I introduce one of the famous movie director in Japan.

<I2> C1: What?

     C3: Could you repeat that?

     W5: ((shows a picture of a man)) do you know him? He’s the most famous movie director in Japan...do you know him?

More negotiation cases (45.15%) in videoconferencing reached the response stage. Responses are usually in the form of either explanation or repetition of the problematic statement. The following excerpt is an example of a negotiation case ended at the response stage with an explanation of the word ribbon.
Videoconferencing Excerpt 3: Negotiation Ending with explanation Response

<T> C2: The next part I’m going to introduce is this, is this, it is named as silk ribbon.

<I> J1: Ribbon?

<R> C2: It is something you wear around your neck. (3.0) Can you hear it clearly? It is a ...it is about two inches in width, wide, wide, and three feet in length...length...long...

Some responses found in the videoconferences were simply repetitions of the problematic statement as shown in the following example. J3 was told that in China, people knew about the special shoes that match Japanese kimono. Amazed, J3 asked whether all Chinese people knew about the shoes. He talked at normal speed with noticeable accent. C2 did not understand J3, but after J3 repeated the question in a lightly slower speed, C2 understood him. This is a typical example found in videoconferencing where when the speed of the conversation reduces, nonunderstanding appears to be easily resolved.

Videoconferencing Excerpt 4: Negotiation Ending with Repetition Response

<T> J3: Are they known to all Chinese, or only some Chinese know them?

<I> C2: Pardon?

<R> J3: Err...are they known to all Chinese, or only some Chinese, Chinese people, know them?

C2: Mmm...nearly every Chinese know this...this kind of shoes.
Among all the 206 negotiation episodes found in videoconferencing, 80 or 38.83% end at the stage of reaction to response (RR). A positive RR (RR+) is an explicit or implicit indication of understanding. As in the following example, J5 said I understand, which is an explicit RR+, to end the meaning negotiation and switch back to the discussion of the pre-assigned topics.

Videoconferencing Excerpt 5: Negotiation Ending with Positive Reaction to Response

<T> C2: What’s the fashionable clothe in Japan now?

<I> J5: Fashionable clothes?

<R> C2: Popular clothes.

<RR+> J5: Popular... I understand.

A negative RR (RR-) is an explicit or implicit indication of nonunderstanding, and may lead the negotiation back to the response stage as the learners attempt to resolve the nonunderstanding in various ways. In the following example, C1 and C2 had trouble understanding the Japanese phrase given by J5. J5 explained it was a kind of food, but C2 misheard it and gave a negative RR, which led to another round of response. In videoconferencing, accents of the speaker and comprehension deficiency of the listener tend to cause nonunderstanding as well as misunderstanding.

Videoconferencing Excerpt 6: Negotiation Containing Negative Reaction to Response

<T> J5: It mean Happy New Year... and... and... (3.0) in Japan, we eat (talk not recognizable)
C1: Pardon?

(J5 shows on slide: OECHI RYORI)

C1: Sorry what does it mean?

J5: It’s traditional food.

C2: Choose?

J5: Food.

C2: Food, oh, food, ok, ok.

In some cases, after a positive RR, learners confirm with each other to make sure the nonunderstanding is resolved and to mark the end of the meaning negotiation. The following excerpt ends at the confirmation stage. J1 raised the question Tassel? at the same time as C2 asked Have you seen it. Knowing the answer, J1 wanted to confirm that what he had seen in a movie is tassel.

Videoconferencing Excerpt 7: Negotiation Ending with Confirmation

C2: This is...and this is...this is tassel...silk tassels. [Have you seen it?]

J1: [Tassel?]

C2: Yes...have you seen it? (3.0) Tassel...have you seen it? t, a, s, s, e, l, tassel.

J1: In movie, I saw ... that is named tassel, ok?

(3.0)

C2: Ok.
Different from the excerpt above, some negotiation episodes reach the Reaction to Confirmation stage when the speaker who caused the nonunderstanding confirmed with other learners that the problem was successfully solved, as shown in the following example.

**Videoconferencing Excerpt 8: Negotiation Ending with Reaction to Confirmation**

<T> J2: Err...in Japanese school, there is no ((talk not recognizable)).

<I> C1: What?

<I> C2: Can you write it down?

<R> J2: No ((talk not recognizable))...can you understand?

<RR-> C1: Sorry, could you write it down?

(3.0)

<R> (J2 showing to camera the word guideline)

<RR+> C ((together)): Oh, guideline.

(3.0)

<C> J2: Ok?

<RC> C (together): Ok.

**Comparison of Negotiation Routines in Text Chat and Videoconferencing**

In the same amount of time (roughly 12 hours total), the text chat sessions and the videoconference sessions yielded scripts of 26,182 and 33,062 running words respectively. There are less words in the text chat scripts apparently due to the written nature of text chatting, and the learners were not able to type fast enough to reach the normal speed of talking at the videoconferences. Although there are less words, the
text chat scripts yielded 2,921 turns, which is close to the 3,090 turns found in the videoconference scripts. Turn taking seems to happen more often in text chat than in videoconferencing.

Participants tended to pop out from the conversation and negotiate meaning when nonunderstanding occurred. There are less negotiated turns in text chat than in videoconferencing. In the text chat scripts, out of a total of 2,921 turns, 150 or 5.14% are negotiated turns. In the videoconferencing scripts, out of 3,090 turns, 876 are negotiated turns, reaching 28.35%. Videoconferencing appears to cause more nonunderstanding and therefore more negotiation of meaning. In videoconferencing, topics are not intertwined, only one learner can speak at a time, and learners need to take turns to speak. When nonunderstanding occurs, learners feel the need to solve the problem or give up the topic in order to maintain the flow of conversation. In text chat, all learners can type and send information simultaneously and the conversation appeared on the computer screen appears to be intertwined. When nonunderstanding occurs to one line of conversation, it may not affect other conversations that flow at the same time. As a result, learners may not feel the need to stop the conversation and negotiate meaning. The following excerpt is an example in videoconferencing when learners were pushed to negotiate meaning and eventually gave up the negotiation.

Videoconferencing Excerpt 9: Nonunderstanding Noticed and Negotiated

<T> C4: Do you know, err...are there many Japanese buy Chinese shares?

<J2> J2: Gear?
<R>  C4: Share, means markets...are there many Japanese buying Chinese shares?

<RR> J2: Chinese shares?

<R>  C4: Stock share, stock shares, Gu Piao (Chinese translation of “stock share”).

<RR> J2: Sorry, I can’t capture your idea...could you say again?

<R>  C4: Are there many Japanese buying Chinese stock shares, stock share?

<RR> J2: Stock share, what is stock share?

<R>  C4: s, t, o, c, k.

<RR> J2: Sorry, could you say it again?

<R>  C4: s, t, o, c, k.

<RR> J2: Err... sorry no time for me, one more person didn’t talk.

   C4: Ok, ok.

In the example above, C4 and J2 negotiated over the term stock share, and J2 gave up the negotiation after several turns of discussion. It is worth noting that J2 claimed he had to give up the negotiation because another learner at his side (Japanese) needed a turn to speak. He might not have understood the problematic word after all the negotiation.

In text chat, talks are intertwined and misunderstanding was not picked up and negotiated as frequently as in videoconferencing. In the following example, learners were greeting each other and introducing themselves. Altogether there were 7 learners
attending the text chat, and the conversations among them appeared to be chaotic at the introduction stage.

Text Chat Excerpt 6: Nonunderstanding Unnoticed

C1: My name translated in Japanese is Ryuan.

J1: Maybe, I think so.

<T> C2: I know little Japanese.

<I> J1: What?

C2: Hi Ryuan.

C1: I can speak a little Japanese...

J1 was talking with C1 about name translation between Chinese and Japanese when C2 chipped in. J1 was puzzled by C2 and asked for clarification. Not noticing J1’s request, C2 continued the conversation and greeted C1. C1 responded C2, picking up C2’s topic on speaking Japanese. J1’s nonunderstanding was ignored.

If nonunderstanding is ignored, the negotiation of meaning will stop at the Indicator stage, as shown in text chat excerpt 6. In the text chat scripts, out of 36 episodes of meaning negotiation, 8 episodes or 22.22% end at the Indicator stage. In the videoconferencing scripts, out of 206 negotiation episodes, 11 or 5.34% end at the Indicator stage.

In both text chat and videoconferencing, most negotiation cases reached the Response stage. In text chat, 17 out of 36 or 47.22% of the indicators of nonunderstanding were responded. In videoconferencing, the number reaches 93 out of 206 or 45.15%, as shown in Table 4 and Table 6. It means most of the
nonunderstanding was responded in both text chat and videoconferencing. In text chat, the responses are usually explanations of the problematic utterances, yet in videoconferencing, responses often take the form of repetition. The reason seems to be related to the written nature of text chat, which allows learners to read the scripts of the conversation and look back at the problematic utterances when nonunderstanding occurs. When reading the chat scripts and looking back at the problematic utterances do not help to resolve nonunderstanding, learners are pushed to paraphrase or explain the problem utterances at the response stage. In videoconferencing, the conversation is in oral form. Nonunderstanding may occur when learners talk with accents or at fast speed. Repetition of the problematic utterances with clearer pronunciation or at a slower speed may resolve nonunderstanding. The following examples found in text chat and videoconferencing show the differences of the response stage in the two modes.

Text Chat Excerpt 7: Negotiation Ending with Explanation Response

<T>    C1: Oh, I like eating very much, so I want to have a food club.

       (1 line of text)

<I>    J2: What is food club?

       (6 lines of text)

<R>    C1: Maybe we can cook together.

Videoconferencing Excerpt 10: Negotiation Ending with Repetition Response:

<T>    C5: And why it’s now cheaper than before?

<I>    J1: Pardon?

<R>    C5: Why it’s now cheaper than before? Cheaper.
J1: Err... I don’t know, sorry.

In the text chat excerpt, C1 mentioned food club, and J1 asked “What is food club.” C1 explained that she meant cooking together. The explanation resolved the nonunderstanding. In the videoconferencing excerpt, J1 and C5 were talking about the price of sushi. J1 did not understand C5’s question “Why it’s now cheaper than before” and asked her to repeat. After the repetition, which was in a slightly slower speed, J1 was able to answer the question by telling C5 that she did not know the reason why sushi was cheaper than before, and the conversation moved forward.

The negotiation of meaning was found to reach the Reaction to Response (RR) stage in both text chat and videoconferencing. As shown in Table 4 and Table 6, 30.56% of the negotiation episodes in text chat and 38.83% in videoconferencing end at the RR stage. As discussed earlier, RR can be either negative or positive. A negative RR usually leads to more rounds of meaning negotiation, while a positive RR is a sign of ending the negotiation, readiness to move on, or simply being polite. This is found true in both text chat and videoconferencing discussion. In the following examples found in text chats and videoconferences, learners clearly marked the ending of meaning negotiation at the RR stage.

Text Chat Excerpt 8: Negotiation Ending with Reaction to Response to Mark

Ending

<T> C1: OMG.

<l> J1: OMG?

<l> C2: What does it mean?
C2: OMG?

<J> J1: What is it?

<R> C1: It’s oh my god!

(4 lines of text)

<RR> J1: I see!

<RR> C2: Thanks.

Videoconferencing Excerpt 11: Negotiation Ending with Reaction to Response to Mark Ending

<T> J1: I think men and women are equal when it comes to riding subway.

<J> C1: Sorry, I... please repeat your answer.

<R> J1: Ok, ok. I think men and women are equal when it comes to riding subway.

<RR> C1: Ah, I understand you.

In the two examples above, learners gave positive RR in both text chat and videoconferencing to express understanding and mark the end of negotiation. The use of positive RR is also a sign a being polite in these two examples.

Negotiation routines may continue after the RR stage if the learners confirm and reconfirm about the meaning of the problematic utterances. Videoconferencing scripts yielded 16, or 7.77%, negotiation episodes ending at the confirmation stage, and 6 episodes, or 2.91%, ending at the reconfirmation stage out of a total of 206 negotiation episodes. Negotiation episodes ending at the confirmation or reconfirmation stages were not found in the text chat scripts. In videoconferencing,
only one speaker talks at a time and the line of conversation can only progress when the speaker resolves nonunderstanding. However in text chat, the intertwined lines of conversation provide learners possibilities to quickly move forward when nonunderstanding is resolved, and the need for confirmation and reconfirmation of the problematic utterance does not appear to be necessary as in videoconferencing.

Videoconferencing Excerpt 12: Negotiation Ending with Reconfirmation

<T>  C4: Wait a minute... (moving closer to the projector, showing a picture of a coat) (5.0) Look at this picture, this is the emperor’s clothes.

<I>  J1: What clothes?

<R>  C4: Emperor.

<RR> J1: Emperor.

<C>  C4: Emperor, emperor wear it when he is discuss something with office, can you understand? Office.

<RC> J1: Yes.

C4: Ok.

In the video script excerpt above, C4 confirmed J1’s answer emperor, and further explained the problematic utterance. In the end, she checked understanding by asking Can you understand, and negotiation was ended when J1 gave positive reaction to confirmation. This is a typical example in the videoconferencing data showing that learners tended to check for understanding at the end of meaning negotiation, which usually takes the form of confirmation and reaction to confirmation. In text chat,
learners tended to move forward rapidly when nonunderstanding was resolved, without checking for understanding, as shown in the following excerpt.

Text Chat Excerpt 9: Negotiation Ending with Response

J1: I want to go to Shang Hai.

J2: Yan, what is your favorite food in China?

C1: It is a beautiful city.

(1 line of text)

C1: Traditional food.

J3: Ok, nice to meet you.

<T> C1: Rumi, I know you like chaofan.

(3 lines of text)

<I> J2: What is chaofan?

(2 lines of text)

<R> C1: It is a kind of rice.

C2: Nice to meet you too! Do you like Chinese food?

J1: C2, what do you like Japanese food?

J4: I’ve heard candied haws on a stick.

J4: Is it so famous?

J3: Yeah, of course!

(1 line of text)

<RR> J2: Oh, I know!! Sorry...yes!! I like chaohan (Note: spelling error for “chaofan”, meaning “stir-fried rice”).
(1 line of text)

1: Other food, J2?

1: J1, I think you are a chief.

(3 lines of text)

1: I hope to be a thief in the future.

2: Also, I like Chinese noodles, of course.

In the discussion episode above, 4 Japanese participants and 3 Chinese participants were talking about Chinese and Japanese foods. Negotiation of meaning happened between C1 and J2, as marked in the script. C1 used a Chinese term chaofan, which puzzled J2. After nonunderstanding was resolved, C1 quickly moved forward by starting a new topic other food, J2? C1 also called on another learner, J1, and started a new topic with him. It appears that in text chat, a positive RR is sufficient enough to end a negotiation, and learners do not feel the need to confirm and reconfirm over the problematic utterances.

**Triggers and Indicators of Nonunderstanding in Text Chat**

Each episode of meaning negotiation goes through at least two stages: Trigger <T> and Indicator <I>. Nonunderstanding is caused by the Trigger <T> and is indicated with the Indicator <I>. Meaning negotiation may continue to other stages if the Indicator <I> is responded, or end at the Indicator <I> stage if nonunderstanding is ignored. This research focuses on analyzing the Trigger <T> and the Indicator <I> stages as they are the basic elements of each meaning negotiation episode.
In text chat, Trigger <T> falls into three subcategories: lexical, content, and spelling to indicate problems that initiate a negotiation episode. Each indicator <I> is classified as global, local, or inferential. Global indicators are usually in the form of general questions or comments like “What do you mean?” “I don’t understand”, while local indicators refer precisely to the language item that has caused the nonunderstanding. An inferential indicator is used when learners infer meanings based on the given information with statements like “Do you mean that...” “So it means...”. Table 7 shows the breakdown of trigger and indicator types in text chat.

Table 7

*Breakdown of Trigger and Indicator Types in Text Chat*

<table>
<thead>
<tr>
<th>Trigger and Indicator Types</th>
<th>Number of Episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger Type</td>
<td></td>
</tr>
<tr>
<td>Lexical</td>
<td>17</td>
</tr>
<tr>
<td>Content</td>
<td>15</td>
</tr>
<tr>
<td>Spelling</td>
<td>4</td>
</tr>
<tr>
<td>Total: 36</td>
<td></td>
</tr>
<tr>
<td>Indicator Type</td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>9</td>
</tr>
<tr>
<td>Local</td>
<td>25</td>
</tr>
<tr>
<td>Inferential</td>
<td>2</td>
</tr>
<tr>
<td>Total: 36</td>
<td></td>
</tr>
</tbody>
</table>

Lexical triggers are problematic cases that can be related to a specific lexical item.

When negotiating over a lexical problem, learners tended to use local indicators, which
are explicit indications of the precise location of the problematic item. The following example is a negotiation episode found in text chat scripts focusing on a lexical problem with a local indicator.

Text Chat Excerpt 10: Negotiation with Lexical Trigger and Local Indicator

<T> J1: I ate ramen.

<l> C1: ramen?

<R> J1: I mean noodle!

(1 line of text)

J1: Sorry.

<RR> C1: I know! My father like it very much.

In the example above, the word ramen causing nonunderstanding is considered a lexical trigger. The indicator of nonunderstanding points out the explicit location of the problem: ramen? Lexical nonunderstanding cases are usually responded with explanations of the problematic utterances but not repetitions. As in this example, J1 explained that ramen means noodle, which successfully solved the problem.

Content triggers are problematic utterances that are vague in meaning but cannot be clearly related to any lexical items. Indicators to a content nonunderstanding are usually global indicators. As shown in the following example, global indicators do not identify the trigger specifically, but take the form of a general inquiry, like “What do you mean?” or “I don’t understand.”

Text Chat Excerpt 11: Negotiation with Content Trigger and Global Indicator:

J1: and do u wanna be a tracher?
(2 lines of text)

<T> C1: but I have many study plans.

<I> J2: What do you mean?

(1 line of text)

<I> J1: hmm

J1: so

<I> J2: I did not quite catch it

(2 lines of text)

<R> C1: I determined to be an English teacher in the future

J1 asked C1 whether she wanted to be a teacher. Not answering the question, C1 said but I have many study plans, which triggered nonunderstanding. The other learner at the discussion, J2, indicated nonunderstanding with a global indicator What do you mean? J1 expressed the same idea with hmm and so. As a response, C1 explained that she did plan to be a teacher, answering J1’s initial question. Similar to negotiations triggered by lexical items, content triggers usually require explanations of the problematic utterances but not just repetitions.

Spelling errors in text chat sometimes cause nonunderstanding, which is usually indicated by local indicators. As in the following example, negotiation was started by a spelling error.

Text Chat Excerpt 12: Negotiation with Spelling Trigger and Local Indicator

<T> J1: I hope to be a thief in the future.

(2 lines of text)
C1: J1, what? a thief?

(R) J1: no! a chef!

Nonunderstanding can be indicated by inferential indicators. In the text chat scripts, inferential indicators are rare. The only two such cases are found in Text Chat Excerpt 5 and the following example.

Text Chat Excerpt 13: Negotiation with Inferential Indicator

J1: Shenzhen is special economic zone...my dictionary says...

(R) C1: long before, it’s just a poor area where people live on fishing

(I) J1: You mean Shenzhen?

(R) C1: Yes but now it has been developed a lot

In the example above, J1 and C1 were talking about Shenzhen, a city on the southeast coast of China. J1 had trouble referring the antecedent of the pronoun it in C1’s comment long before, it’s just a poor area where people live on fishing. J1 inferred “You mean Shenzhen?”

Triggers and Indicators of Nonunderstanding in Videoconferencing

In videoconferencing, the Trigger <T> falls into three subcategories: content, lexical and pronunciation.. Each indicator <I> is categorized as global, local, or inferential. Table 8 shows the breakdown of trigger and indicator types.
Table 8

*Breakdown of Trigger and Indicator Types in Videoconferencing*

<table>
<thead>
<tr>
<th>Trigger and Indicator Types</th>
<th>Number of Episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger Type</td>
<td></td>
</tr>
<tr>
<td>Lexical</td>
<td>64</td>
</tr>
<tr>
<td>Content</td>
<td>128</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>14</td>
</tr>
<tr>
<td>Total: 206</td>
<td></td>
</tr>
<tr>
<td>Indicator Type</td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>139</td>
</tr>
<tr>
<td>Local</td>
<td>67</td>
</tr>
<tr>
<td>Inferential</td>
<td>0</td>
</tr>
<tr>
<td>Total: 206</td>
<td></td>
</tr>
</tbody>
</table>

Most of the triggers in videoconferencing are content triggers, which are utterances vague in meaning. Content triggers are usually indicated with global indicators. The following is an example of nonunderstanding caused by a content trigger.

*Videoconferencing Excerpt 13: Negotiation with Content Trigger and Global Indicator*

<T> J3: My hobby is listening...watching...watching...nature.

<I> C3: Could you please say it again?

<R> J3: My hobby is...is... (2.0) ... fish.

<RR> C3: Pardon?
<R> J3: I like catching fish.

<RR> C3: Oh...catching fish...I like singing.

In the example above, J3’s statement about his hobby was vague in meaning. The indicator of nonunderstanding is a general question Could you please say it again? J3 explained his hobby, but the explanation was still not clear. The indicator was again a global one, Pardon? J3 finally was able to rephrase his statement and make himself understood by clearly indicating his hobby was catching fish.

Lexical problems also trigger nonunderstanding in videoconferencing. Cases of nonunderstanding triggered by lexical problems were indicated either with local indicators or with global indicators. The following example shows a case with lexical trigger and a global indicator.

Videoconferencing Excerpt 14: Negotiation with Lexical Trigger and Global Indicator

<T> C3: And next is pasting...pasting means gluing things on the doors or windows, like this ((pointing to the slide)), the meaning of pasting is happiness...we have four signs here, four pictures like this, they are couplets.

<I> J1: Sorry, could you say it again?

<R> C3: I say they are couplets.

<RR> J1: Couplet, oh, couplets...so that is called?

<R> C3: Couplets, couplets is this ((pointing to the picture)).

<RR> J1: Oh, yes.
In the episode above, C3 talked about the Chinese New Year tradition of pasting couplets. J1 asked a general question Sorry, could you say it again? At this point it is hard to distinguish the type of the trigger because J1 did not indicate clearly which part in C3’s statement caused nonunderstanding. As a response, C3 said I say they are couplets, and J1 said couplets, so that is called? It was clear that J1 had trouble understanding the word couplet.

Lexical triggers in videoconferencing can also be indicated with local indicators, like in the following example.

Videoconferencing Excerpt 15: Negotiation with Lexical Trigger and Local Indicator

<T> J3: Trumpet is like this (gesturing to camera the arm position of playing trumpet)... it’s an instrument.

<I> C1: Musical instrument?

<R> J3: Ok, anyway, that’s it.

J3 was talking with C1 about his hobby of playing trumpet. J3 gestured to the camera in order to show C1 the meaning of the word trumpet. C1 successfully inferred from the gesture that trumpet was a kind of musical instrument.

In videoconferencing, it is sometimes difficult to distinguish lexical triggers from pronunciation triggers, which are incorrect or unclear pronunciations, accents, or speaking too fast to be understandable. In the following example, C1, C2, and J3 were talking about animation movie, which caused nonunderstanding, but it appears to be difficult to classify the trigger type. Nonunderstanding might be caused by J3’s
pronunciation error and accent, yet could also be caused by the inability of C1 and C2 to understand the meaning of animation. At the end of the negotiation, C2 said you may continue please... I think it’s interesting. C2 seemed to imply that she understood the meaning of animation. This case was classified as nonunderstanding caused by pronunciation trigger but not lexical trigger because nonunderstanding appeared to be solved when the problematic word animation was spelled out. Since both C1 and C2 indicated nonunderstanding, and in different ways, this case presents both a global and a local indicator.

Videoconferencing Excerpt 16: Negotiation with Pronunciation Trigger and Global and Local Indicator

<T> J3: I also want to talk about Japanese animation.

<I> C1: What?

<I> C2: Japanese what?

<R> J3: Animation.

<RR> C1: Education?

<R> J3: Animation.

<RR> C1: Education?

<RR> C2: Could you write it down?

(3.0)

<R> J3: (showing the word animation to camera) Ok?

<RR> C1: Err...

<RR> C2: You may continue please...I think it’s interesting.
Comparison of Triggers and Indicators of Nonunderstanding in Text Chat and Videoconferencing

There are more lexical triggers in text chat than in videoconferencing. Since lexical triggers are usually indicated with local indicators, text chat produces more local indicators. In text chat, lexical problems are not easy to be overlooked because of the written nature of the conversation. Typing errors can also get attention and trigger negotiations, which are usually classified as lexical triggers because nonunderstanding can be directly related to a specific lexical item. However in videoconferencing, lexical problems tend to be easily overlooked as the oral conversation rapidly moves on. And typing errors do not trigger nonunderstanding since they do not exist in videoconferencing. In the following text chat example, a typing error caused nonunderstanding, which was indicated with a local indicator.

Text Chat Excerpt 14: Negotiation with Lexical Trigger and Local Indicator

<T> J1: Are you alne?

(1 line of text)

<I> C1: Alne?


Without typing errors, videoconferencing does not appear to be smoother than text chat. Pronunciation errors, strong accents, and listening comprehension deficiencies cause most of the nonunderstanding in videoconferencing. These problems sometimes mix up with lexical problems causing nonunderstanding or misunderstanding in videoconferencing. In the following videoconferencing example, the lexical item cram
school caused misunderstanding but not nonunderstanding. That means the trigger of nonunderstanding was overlooked and the conversation went on based on the wrong understanding of the lexical item.

**Videoconferencing Excerpt 17: Negotiation with Lexical/Content Trigger and Inferential/Global Indicator**

<T1> J2: The examinations are...are usually interview, so parents, parents want their children to pass...so parents make...take their children to cram school, you know cram school?

C1: Yes.

J2: Ok, so it takes a lot of money.

<I1 T2>C1: It’s very expensive, right?

<I2> J2: Err?

C1: We have same situation...there are both public schools and private schools in China.

In the example above, there are two related cases of meaning negotiation. The first case was triggered by the term cram school, which was misheard or misunderstood as private school. The Japanese learner made the point that parents spent a lot of money on cram schools. The Chinese learner misunderstood cram schools as private schools, and inferred “It’s very expensive, right?” This question triggered another case of nonunderstanding. The Japanese learner was puzzled with “Err?” The Chinese learner then said that there are private schools in China too, indicating she was not able to understand cram school initially. Unfortunately the Japanese learner did not realize
the misunderstanding and changed the topic right away. The negotiation over cram school was then lost.

Another difference between text chat and videoconferencing is that content triggers cause more nonunderstanding in videoconferencing than in text chat. In videoconferencing, conversation is often interrupted with global indicators of nonunderstanding, like “What?” “Err?” “Pardon?” “Can you repeat?” It is sometimes not easy to trace back the trigger and distinguish the trigger type. In addition, as mentioned earlier, pronunciation problems cause nonunderstanding, and it can be very difficult to distinguish pronunciation triggers from content triggers. In the following example, the trigger of nonunderstanding is classified as content. Repeated several times, the problematic item still causes nonunderstanding. However, it is also possible that accents cause nonunderstanding. Learners were talking about traditional Chinese clothes and related culture issues.

Videoconferencing Excerpt 18: Negotiation with Content Trigger and Global Indicator

<T> C2: Err...they wear different clothes when they met with different people, can you understand?

<I> J1: Sorry, no.

<R> C2: They change clothes when they met different people.

<RR> J1: They...

<R> C2: They change clothes, do you know change? They change clothes when they met different people.
J1: When they what?

C2: They wear different clothes, clothes, they wear different clothes when they met different people.

J1: Different people?

C2: Different people. (4.0) ((whispering in Chinese with her peers, discussing whether they should give up the topic)) Err...for example, err...understand?

J1: For example?

C2: For example, if they met the people who is power than them, they will wear good clothes ((showing the word different on slide)).

J1: Good clothes, different.

C2: Yes, err... otherwise, they can wear whatever they want because the version of rank at that period is very...obvious. (2.0) Can you understand me?

J1: Err...not sure.

C2: (smiling) Err...err...that means if they met the people who is power than them, power.

J1: I know what power mean, I think once you said do more power.

C2: Met, they met the people, meet, they met is people, who is power, is...

C1: When they meet the king.

C2: When they meet the king, they will wear good clothes, king.
<RR> J1: King?

<R> C2: Yes, emperor.

<RR> J1: King or emperor?

<R> C2: Wear good clothes.

<RR> J1: Oh.

<R> C2: Otherwise they can wear whatever they want.

<RR> J1: Whatever they want.

<C> C2: Yes, err...that’s all.

<RC> J1: Thank you.

Above is a typical example of meaning negotiation found in videoconferencing with content, or pronunciation triggers, or probably both. The Chinese learner, C2, tried to explain to the Japanese learner J1 that in ancient China, at different occasions, people needed to dress accordingly. This statement caused nonunderstanding, but it appears to be difficult to classify the trigger type. The trigger could be pronunciation because of the fact that both C2 and J1 spoke with noticeable accents and they did not share a common L1. However, the trigger also appears to be content related because the topic was completely new to J1 who did not have sufficient background knowledge about ancient Chinese traditions. Besides, after C1 and her classmate C2 repeated and explained the statement several times, J1 still had trouble understanding the statement. It appears to be more reasonable to classify the trigger as a content one but not a pronunciation one.
In summary, lexical triggers are easier to be picked up and negotiated in text chat than in videoconferencing. Accordingly, in videoconferencing, lexical triggers tend to be neglected or misunderstood. What appears to cause more negotiation in videoconferencing is content trigger, even though sometimes it is difficult to distinguish content triggers from pronunciation triggers.

**Communication Strategy Use in Text Chat**

From the text chat scripts of 26, 182 running words, learners were found to use various communication strategies during the chat sessions. Table 9 is a list of the communication strategies studied in this research. Definitions and explanations of the strategies can be found in the Methodology part of this paper.

Table 9

**Communication Strategy Use in Text Chat**

<table>
<thead>
<tr>
<th>Communication Strategies</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing (Fr)</td>
<td>2</td>
</tr>
<tr>
<td>Tone (T)</td>
<td>16</td>
</tr>
<tr>
<td>Paralinguistic Strategies (P)</td>
<td>222</td>
</tr>
<tr>
<td>Message Abandonment (MA)</td>
<td>0</td>
</tr>
<tr>
<td>Code Switching (CS)</td>
<td>41</td>
</tr>
<tr>
<td>Code Switching to Assist Meaning (CSA)</td>
<td>1</td>
</tr>
<tr>
<td>Comprehension Check (CC)</td>
<td>3</td>
</tr>
<tr>
<td>Inferential Strategies (I)</td>
<td>14</td>
</tr>
<tr>
<td>Fillers (Fi)</td>
<td>6</td>
</tr>
<tr>
<td>Appear for Assistance (AA)</td>
<td>0</td>
</tr>
<tr>
<td>Self-Correction (SC)</td>
<td>11</td>
</tr>
</tbody>
</table>
Among all the strategies used in text chat, the most frequently used is Paralinguistic Strategies (P), which are non-verbal expressions used to express pitch, intonation, stress, and emotions like surprise, happiness, etc. In the text chat scripts, altogether 222 such cases were found. Emoticons, capital letters, punctuations, and word substitutions (ur = you are, 4 = for) are common types of Paralinguistic Strategy. Examples include 88 = bye bye, hahaha = laughter, ??? = what? :-) = smile, etc. In the following example, the Chinese learner, C1, mismatched the names of the two Japanese learners, J1 and J2, earlier in the conversation and was trying to make sure she finally got the names right.

Text Chat Excerpt 15: Use of Paralinguistic Strategies (P): Punctuation and Emoticon:

C1: What are you doing, Yumike?
C1: Am I right this time?
J1: I’m...
C1: ?
J2: ??
C1: ???
J1: ??
J2: ????
C1: -_-^`
J2: Hey! Yumike.
C1: Well, who is the most popular singers among your school?
C1 called on J1 and asked him whether he was Yumike. J1 did not give a clear answer, so C1 used a question mark to show nonunderstanding. The other Japanese learner, J2, was apparently confused by the conversation between C1 and J1, especially the question mark, and J2 typed in two question marks. C1 and J1 were also confused and they both typed in more question marks. Eventually, C1 used an emoticon (-_-) to end the confusion. In this context, the emoticon (-_-) seems to represent being puzzled, confused, or probably tired.

Some emoticons were apparently made up by some participants, and quickly spread among others. In the following text chat example, Chinese participant C1 was amazed by an emoticon used by Japanese participant J1 and asked him the meaning of that emoticon.

Text Chat Excerpt 16: Use of Paralinguistic Strategies (P): Emoticon:

C1: I admire you.
J1: (^_^?)
C1: I like that smpol
(1 line of text)
J1: What is smpol?
C1: Sorry
C1: Symol
J1: What is symol?
(1 line of text)
C1: In fact, you typed it just now
J1: ( ^_^? ( ^_^?

(3 lines of text)

C1: Please tell me.

In the example above, J1 used an emoticon to respond to C1’s comment I admire you. C1 did not know the meaning of the emoticon but liked it and asked J1 to explain. This is a common example found in the text chat data that shows learners create emoticons and spread them among other learners, who seemed to enjoy learning about new emoticons. In this context, this emoticon ( ^_^? seems to mean a shy smile and a confirmation check.

Code switching (CS) is another kind of communication strategy that learners use in text chat. Code switching is the use of L1 words or expressions without translating them to resemble the morphology of L2. In text chat, 41 cases of Code switching were founded. Both the Chinese and the Japanese participants tended to use Chinese characters to express meanings, especially when they had trouble translating what they planned to say into English, or when they tried to describe a specific Chinese or Japanese concept. In the following example, the participants were talking about a song of a Chinese singer. The song is called which means ninja, covert agents of feudal Japan, specializing in the arts of war. The Japanese learner J1 typed in the Chinese characters and Chinese phonetic alphabets for ninja (yinshenfa) to tell his Chinese partners the name of the song.

Text Chat Excerpt 17: Use of Code Switching Strategy (CS):

C1: Do you know Jay Chou?
J1: Yes!! He is in favor among the girls!

(3 lines of text)

J1: I heard song by him.

(12 lines of text)

C1: You can type out Chinese!

(7 lines of text)

J1: Is yinshenfa in Chinese.

Different from Code switching, Code Switching to Assist Meaning Expression (CSA) is to use L1 words and expressions to assist learning the corresponding words or expressions in L2. The participants did not seem to use this strategy very often. There is only one case of Code Switching to Assist Meaning Expression in the text chat data, as shown below.

Text Chat Excerpt 18: Use of Code Switching to Assist Meaning Expression Strategy (CSA)

J1: Do you like Japanese cartoons?

C1: Yes.

(3 lines of text)

J2: What is your favorite?

C1: Wait a moment, I don’t know how to say it.

J1: I like Huoyingrenzhe.

C1: Yes, yes.

J2: Do you like it?
C1: I like the hero very much.

(1 line of text)

J1: Does it mean (Note: Chinese word meaning a man admired by others for doing something brave)

(2 lines of text)

C1: No means (Note: Chinese word meaning the main male character in a movie).

In the example above, Chinese participant C1 made the statement that she liked the hero in the cartoon Huoyingrenzhe (Note: name spelled in Chinese Phonetic Alphabet). The word hero has two different meanings in English, and Japanese participant J1 wanted to make sure he understood the right meaning. C1 explained hero in this context means the main character in the cartoon but not a person admired by others because of brave behaviors.

In text chat, learners do use different tones (T) as a strategy to express meanings and feelings in the conversation. In the following example, participants were talking about food and cooking. Chinese participant C1 mistakenly called Japanese participant J1 a thief for chef, which apparently upset J1, even though C1 did not realize what was wrong.

Text Chat Excerpt 19: Use of Tone Strategy (T):

C1: Other foods, Ruyomi?

C1: Kiyushi, I think you are a thief.

J1: Stop!
C1: What?

C1: What’s wrong?

This incident ended right here when other learners chipped in and talked about other issues. Both C1 and J1 did not continue and clarify the misunderstanding. However, the apparently rude tone found in this conversation did not occur often in text chat. Instead, learners tended to be very polite during the conversation, as shown in many text chat episodes listed earlier.

Inferential Strategy (I) in text chat refers to asking and commenting on specific parts of the preceding discourse or asking questions using established information to test understanding. Altogether 14 such cases were found in the text chat data. In the following example, two Japanese participants J1 and J2 were talking with their Chinese partner C1 about choosing courses and earning academic credits in the Japanese university. J2 used Inferential Strategy to confirm with J1 and pushed J1 to clearly indicate the exact credit numbers he had earned.

Text Chat Excerpt 20: Use of Inferential Strategy (I):

C1: I’m already get enough points.

(2 lines of text)

J1: Already?

C1: Yes.

(2 lines of text)

J1: I respect you.

(1 line of text)
J2: You are diligent.

J1: I got no more than half point.

(2 lines of text)

J2: you mean not more than half points?

(2 lines of text)

J1: I have 40 points.

Self-correction (SC) as a communication strategy refers to learners correcting themselves when errors occur. In the text chat scripts, 11 such cases were found. In the following example, the Chinese participant C1 used Self-correction to correct the spelling of time in order to avoid nonunderstanding or misunderstanding. It’s worth noting that in this example, Japanese participant J1 also used Inferential Strategy to clarify meaning with C1.

Text Chat Excerpt 21: Use of Self-Correction Strategy (SC):

J1: In Japan, students have to get much class to be a teacher, how about in China?

(2 lines of text)

C1: Too much.

J1: So you don’t have much free time?

C1: Yeah, almost no tome.

C1: Time.

J1: In Japan, the examination to be a teacher is too difficult.
Using fillers (Fi) is a strategy to fill pauses in conversation with gambits. In the text chat scripts, 6 such cases were found. In the following example, participants J1, J2, and J3 were talking about subjects at the Chinese and the Japanese universities, and asking each other how they did for each subject.

Text Chat Excerpt 22: Use of Fillers Strategy (Fi):

J1: and physics, I learned, but I couldn’t understand about waves

J2: Thank you! But it is so difficult...

J3: Not so much, in fact

(1 line of text)

J2: Oh really?

J3: ummm

J3: ...

In the example above, J3 claimed physics was not so difficult for him. Asked by J2 to confirm his idea, J3 appeared to be hesitating, and used fillers to respond.

Comprehension Check (CC) is another strategy that learners used in text chat. There are 3 cases of Comprehension Check found in the text chat scripts. Learners ask respondent whether s/he has understood in order to maintain smooth communication. The questions learners ask can be either general ones like Do you understand? Do you know? or specific questions concerning certain information in the conversation, as shown in the following example. In the following example, Japanese participants J1 and J2 were chatting with Chinese participant C1 about J1’s part-time job as a tutor. J1 used
Comprehension Check to make sure that all the participants understood the meaning of tutor.

Text Chat Excerpt 23: Use of Comprehension Check Strategy (CC):

C1: What are you doing? In recent period

(2 lines of text)

J1: part time job

(1 line of text)

J2: What job?

J1: Teacher...?

J2: you mean cram school?

(2 lines of text)

J1: yes

J1: but I’m not a teacher, I’m a tutor.

(1 line of text)

J1: do you know meaning tutor?

(2 lines of text)

C1: yes, because my mother is a teacher too.

J2: hee

(2 lines of text)

J2: hee means Japanese I SEE

The last strategy found in the text chat scripts is Framing (Fr), which is a way of marking the closure of old topics and the initiation of new ones. There are only 2 cases
of Fr found in text chat. In the following example, Chinese participant C1 was talking with Japanese participant J1 about being a teacher in China and Japan, while other participants were talking about movies. Ready to switch to the movie topic, C1 used well as a Framing strategy to frame the end of the discussion about teachers.

Text Chat Excerpt 24: Use of Framing Strategy (Fr):

J1: In Japan, the examination to be a teacher is too difficult...

J1: How about in China?

(3 lines of text)

C1: oh, really? But ours are just so-so.

(1 line of text)

C1: but many people don’t like to be teachers.

J1: In Japan, the number of children is really decreasing, so it is difficult

C1: Well

C1: The movie, where is my movie.

The other two communication strategies studied in this research are Message Abandonment (MA) and Appeal for Assistance (AA), however, cases of using these two strategies were not found in the text chat scripts, and learners apparently did not use these two strategies in the text chat conversations.

**Communication Strategy Use in Videoconferencing**

Using the same list of communication strategies studied in the text chat data, the researcher studied the videoconferencing scripts and found that learners used all
the strategies in videoconferencing. Table 10 presents the number of cases for each communication strategy found in the videoconferencing scripts.

Table 10

*Communication Strategy Use in Videoconferencing*

<table>
<thead>
<tr>
<th>Communication Strategies</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing (Fr)</td>
<td>50</td>
</tr>
<tr>
<td>Tone (T)</td>
<td>16</td>
</tr>
<tr>
<td>Paralinguistic Strategies (P)</td>
<td>46</td>
</tr>
<tr>
<td>Message Abandonment (MA)</td>
<td>16</td>
</tr>
<tr>
<td>Code Switching (CS)</td>
<td>4</td>
</tr>
<tr>
<td>Code Switching to Assist Meaning (CSA)</td>
<td>1</td>
</tr>
<tr>
<td>Comprehension Check (CC)</td>
<td>83</td>
</tr>
<tr>
<td>Inferential Strategies (I)</td>
<td>32</td>
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<tr>
<td>Fillers (Fi)</td>
<td>296</td>
</tr>
<tr>
<td>Appear for Assistance (AA)</td>
<td>22</td>
</tr>
<tr>
<td>Self-Correction (SC)</td>
<td>4</td>
</tr>
</tbody>
</table>

In videoconferencing, the participants used Fillers Strategy (Fi) the most often.

In altogether 296 cases, the participants used Fillers Strategy to fill the gaps and maintain the natural flow of conversations, or when they had trouble understanding and/or expressing an idea. Some participants tended to use Fillers Strategy more often than others, especially those with relatively lower L2 competence. Typical cases of
Fillers Strategy include the use of err..., well..., umm..., etc. In the following example, Japanese participant J1 talked with C2 about Japanese culture and holidays celebrated in Japan.

Videoconferencing Excerpt 19: Use of Fillers Strategy (Fi):

J1: On 25th, in November, we visit the shrine, err... to celebrate the New Year’s Day, (talk not recognizable) and for the funeral err...err...to, err...to, err... to mourn on the people, and err... (talk not recognizable) so maybe Japanese will celebrate err... in fashion, for example, like Muslin, or Jewish, other culture's Memorial Day, those mixes Japanese culture, custom, and, err... often give the impact on the people especially for the Christian and Muslin, (talk not recognizable) relation, err... of course it influence Japanese international trade because it is not always good influence, or (talk not recognizable) on Japanese people. We look like err... making good international trade, but (talk not recognizable) trouble with identity crises, do you understand, [identity crises]?

C2: [identity]?

J1: Identity.

C2: Oh, yes.

J1: That is, that is, I mean, Japanese culture.

C2: Oh.

Apparently J1 had trouble expressing his ideas fluently and he needed to pause and use Fillers Strategy very often during the talk. Some of his utterances were
not recognizable. Even so, the conversation moved on without being interrupted by meaning negotiations. One of the reasons might be J1’s use of another communication strategy, Comprehension Check. J1 stopped and checked for understanding when he came to a difficult word. Getting a positive answer, J1 moved on with the conversation and C2 did not ask him to clarify his talk.

Comprehension Check (CC) strategy was used very often in the videoconferences, with altogether 83 cases. The participants tended to stop and check for comprehension when they came across difficult lexical items, at the end of a long statement, or when there was a pause or short delay in response to a previous topic. Besides the example mentioned above, there are many other example found in the videoconferencing data with the use of Comprehension Check. The following example shows the use of Comprehension Check at the end of a long statement. C3 was introducing a traditional Chinese dress style to the Japanese learners. After a long talk, C3 stopped and checked for comprehension.

Videoconferencing Excerpt 20: Use of Comprehension Check Strategy (CC):

C3: Because, because the ruler set up a system (whispering in low voice to her peers in Chinese, showing slides with introductions written in English about cheongsam, than facing the camera) because the system, Eight Banners, Eight Banner, so the people in the banners called Banner People...err...the shoes, the clothes, these people wear are called Banner Dress, so in China, banner is called Qi, so the dress is called Qi Pao, in China it’s called Qi Pao. (2.0) Can you hear me?
J1: Yes, yes.

C3: Do you understand this?

(Slide show says: The End) (Girls in the Chinese group giggle.)

C3: Have you any questions?

(3.0)

J2: Why do you choose this topic?

In the above example, Chinese C3 used Comprehension Check a few times to check for understanding. The topic seemed to be difficult to understand because it was closely related to Chinese culture and many Chinese expressions were used in the description. Apparently culture related topics tend to trigger the use of Comprehension Check in videoconferencing.

In videoconferencing, the participants needed to mark the closure of old topics and the initiation of new ones with Framing Strategy (Fr). In this study, each participant was required to present shortly on a culture-related topic followed by free discussions among group members and their overseas partners. The use of Framing Strategy usually marks the beginning or the ending of those short presentations, and readiness to begin free discussions. The participants also used Framing Strategy to signal the change of speakers. In the videoconferencing data, 50 cases of Framing Strategy were found. In the following example, J2 began his short presentation on Japanese education and examinations at school. After a brief meaning negotiation, Chinese participant C1 signaled J2 to move on with his topic by using Framing Strategy, we understand, please go on.
Videoconferencing Excerpt 21: Use of Framing Strategy (Fr):

J2: Ok, I will...I will talk about Japanese education...err...examination.
   Children take... err... [examination]
C1: [Could you speak more slowly?]
J2: Oh, err... in Japan, there are many examination.
C1: Yes, same here.
J2: Every week, students take exams.
(3.0)
C1: Yes, we understand, please go on.
J2: Ok, to enter college, we have no examinations.

The participants used Paralinguistic Strategy (P) to aid meaning negotiation in
videoconferencing. Altogether 46 such cases were found. There are two commonly
used Paralinguistic Strategy in videoconferencing, one is the use of gestures and body
language, the other is to use writing tools, including pen and paper, the chalk board, and
computer software like Microsoft Word to spell out difficult lexical items. The
participants tended to spell out and write down abstract concepts and difficult lexical
items, and demonstrate other concepts with gestures and body movements. In the
example below, Japanese participant J9 was introducing her interest in shopping and
the conversation was interrupted by nonunderstanding of the term beat down. Her
Chinese partner C1 requested that she spell out the term and this tuned out to be a
quick way to get meaning across.
Videoconferencing Excerpt 22: Use of Paralinguistic Strategy (P)

J9: I like to talk about playing ((talking not recognizable)).

C1: Sorry...can you say that again?

J9: Err... beat down.

C1: Could you spell it... could you write it down?

(J9 writes on paper and shows to camera: beat down=make cheap)

C1: Bargain?

J9: Yes, bargain.

The use of Inferential Strategies (I) also appears in the videoconferencing scripts. Altogether 32 such cases were found. The participants were able to ask questions with information they had already received to check for understanding. Like in the example above, the Chinese participant successfully figured out the meaning of beat down using the information provided by the Japanese learner. The use of Inferential Strategy appears to be important to avoid nonunderstanding especially when the interlocutors were not competent enough to precisely express their ideas. For example, in the following videoconference episode, Chinese participant C3 talked about the history of the traditional Chinese dress. Japanese participant J2 asked why do you choose this topic, which sounded awkward to C3. Based on the context of the conversation, C3 inferred you mean this story, which turned out to be the exact question C3 wanted to ask. The first part of this conversation episode was quoted earlier to demonstrate the use of Comprehension Check Strategy in Videoconference Excerpt 20.
Videoconferencing Excerpt 23: Use of Inferential Strategy (I):

C3: Because, because the ruler set up a system (whispering in low voice to her peers in Chinese, showing slides with introductions written in English about cheongsam, than facing the camera) because the system, Eight Banners, Eight Banner, so the people in the banners called Banner People...err...the shoes, the clothes, these people wear are called Banner Dress, so in China, banner is called Qi, so the dress is called Qi Pao, in China it's called Qi Pao. (2.0) Can you hear me?

J1: Yes, yes.

C3: Do you understand this?

(Slide show says: The End) (Girls in the Chinese group giggle.)

C3: Have you any questions?

(3.0)

J2: Why do you choose this topic?

C3: Pardon?

J2: Why do you choose this topic?

C3: Err... you mean this story?

J2: Yes.

C3: Err... I want to introduce, I want to introduce our traditional clothes to you and want to introduce this story, some story, introduce some story, legend, to you, about its original, about how do this dress form, and reason, to you.
J2: (nodding head) Thank you.

The participants tended to use Appeal for Assistance Strategy (AA) in videoconferencing when they came across new lexical items, culture related issues, and other difficulties in conversation. There are 22 cases of using Appeal for Assistance Strategy in the videoconference scripts. In the following example, Japanese participant J5 talked about New Year’s celebration in Japan and mentioned a particular Japanese food. Not knowing what the food was, Chinese participant C1 directly appealed for assistance.

Videoconferencing Excerpt 24: Use of Appeal for Assistance Strategy (AA):

J5: It mean Happy New Year. And, and, (3.0) in Japan, we eat (talk not recognizable).

C1: Pardon?

(3.0)

(J5 showing on slide: OECHI RYORI)

C1: I’m sorry, what does it mean?

J5: It’s a traditional food.

C2: Choose?

J5: Food.

C2: Food, oh, food, ok, ok.

In videoconferencing, the participants used different tones to express feelings and emotions. Altogether 16 cases of using the Tone Strategy (T) were found in the videoconferencing scripts. In most of the cases, the participants used polite and
pleasant tones to cheer up interlocutors and maintain a lively conversation. Impolite, unpleasant, or rude tones were not found in the videoconference scripts. In the following example, Chinese participant C1 asked for questions near the end of a videoconference, in which traditional Chinese dress Qipao was a major topic. Japanese participant J4, a boy, asked a question about Qipao and made a comment that in Japan, some young girls wear Qipao. Another Japanese participant J2, who was a girl, immediately pointed out that J4 was lying. J2 talked in such a pleasant joking tone with a smile that seemed to imply as a boy, J4 didn’t know about girls.

Videoconferencing Excerpt 25: Use of Tone Strategy (T):

C1: Err... do you have any questions? Any questions?

J4: When do you wear Qipao?

C2: When people married, women will wear Qipao.

J4: In Japan, some young girls wear Qipao.

J2: He’s lying. (pointing to J4, smiling)

Message Abandonment (MA) is another communication strategy that the participants used in videoconferencing, with 16 cases found in the videoconferencing scripts. The Message Abandonment strategy refers to giving up the topic when it is too difficult to express. Usually learners gave up topics with clear indicators like I can’t understand. I don’t know. Can we talk about something else? There are also times when learners did not have time to signal comprehension incompetence and directly give up the problematic topic. In videoconferencing, the flow of conversation is usually fast, which compels learners to give up difficult topics quickly. For example, in the
following example, the participants were talking about a picture of a Chinese emperor in an embroidered dragon outfit.

Videoconferencing Excerpt 26: Use of Message Abandonment Strategy (MA):

J5: For example what do you do for your environment?
C1: Err... such as planting trees... control tail gas. (4.0) Can you understand me the meaning of tail gas? Cars have tail gas.
J5: No.
C1: Ok, anyway, ignore it.
J5: Ok, thank you.

In the excerpt above, Chinese participant C1 used the term tail gas to describe tail exhaust. Japanese participant J5 was puzzled. Apparently not knowing the right term, C1 suggested giving up the topic.

In videoconferencing, the participants used Self-Correction Strategy (SC) when they noticed errors in their own speech. In this study, 4 such cases are found in the videoconference scripts. Apparently the participants did not use Self-Correction very often in videoconferencing. One of the reasons seems to be that the fast flow of oral conversation did not provide the participants enough chances to check on their own speech and correct errors. The participants noticed their errors and tried to correct them only when the errors initiated nonunderstanding or misunderstanding, like in the following example.

Videoconferencing Excerpt 27: Use of Self-Correction Strategy (SC):
C3: Oh, err... the ruler of the Qing Dynasty is mainly Man Nationality people. There are many nationality in China, do you know this? (4.0) Nationality means rate.

J1: Rate?

C3: Race.

(3.0)

J4: Nationality, racism.

C3: Err... yes. Nationality.

J4: Ok.

In this example, Chinese participant C3 was introducing nationalities in China. Puzzled by C3’s explanation, Japanese learner J1 asked rate? C3 then realized that she made a mistake and corrected the mistake immediately.

The use of Code Switching Strategy (CS) appeared 4 times in the videoconferencing scripts. The participants used Code Switching when they had trouble describing ideas in English, or when they mentioned specific names of songs, movies, and books written in their own languages. The following example is an exception. Japanese participant J4 knew some Chinese. When talking with Chinese learner C2 about finding part-time jobs, J4 used a Chinese term shangwang, which means surfing on the Internet, to aid understanding.


C2: Is it difficult for you to find a part-time job? Difficult or not?
J4: Not difficult. If we shangwang (Note: Chinese phonetic alphabet meaning surfing on the Internet) or take free magazine, I can find easily part-time job.

Some Japanese and Chinese participants knew each other’s language and this gave them an option for smooth communication when talking about topics hard to explain in English. However, the use of Code Switching to Assist Meaning (CSA) was very rare in this study, with only one case found in the videoconferencing scripts. In this only case, Japanese participant J7 used Chinese to tell his Chinese partner C2 the name of a Japanese city.

Videoconferencing Excerpt 29: Use of Code Switching to Assist Meaning Strategy (CSA):

J8 In Japan no minorities.

J1: In Japan, there are 3... I think 3... uh...different people, one live very north Japan, like Hokkaido, do you know?

C2: No, sorry.

J7: Hokkaido means Beihaidao (Note: Chinese phonetic alphabet, meaning Hokkaido).

C2: Uh, yes, I know.

Comparison of Communication Strategy Use in Text Chat and Videoconferencing

As shown in the analysis above, the participants used various communication strategies in text chat and videoconferencing. The discourse analysis of the transcripts shows that there are differences between communication strategy use in text chat and
in videoconferencing. A survey of learners’ feedback on strategy choice further proves that the two communication modes shape learners’ choice of communication strategies.

In text chat, the three most commonly used strategies are Paralinguistic Strategy (P), Code Switching Strategy (CS), and Tone Strategy (T). Among the three, Paralinguistic Strategy is the most commonly used. Unlike videoconferencing, text chat allows the learner to use various discourse markers by the keyboard to express meanings. These discourse markers are classified under Paralinguistic Strategy. Researchers have found out that discourse markers function in a way similar to non-verbal negotiation strategies that facilitate interaction in face-to-face communications (Lee, 2002b). In text chat, when non-verbal strategies like the use of facial expressions and body movements are not available, learners tend to use discourse markers instead. Punctuations, emoticons, and other keyboard makers are fast, easy, and effective ways to convey meanings in text chat conversations. The use of punctuation apparently improves the speed of the conversation and reduces typing errors, and therefore may avoid nonunderstanding and misunderstanding. The keyboard also gives learners opportunities to express feelings in a creative way by using emoticons. The smiling face “😊” normally means happiness, friendliness, and agreement with previous ideas. The sad face “😢” means confusion, incomprehensibility, regret, and apology. In this study, the participants create their own emoticons and spread the creations among other learners, as shown in Text Chat Excerpt 16. The creations tended to be more complicated and express more subtle meanings than popular emoticons such as the happy and the sad faces. For example, similar to the happy face, “😊” means a smile, yet “*^*” means smile with
bashfulness. The uncommon emoticons could sometimes become interesting topics among the participants while they discussed, learned, and copied the new ways of using the keyboard to express feelings. The use of emoticons seems to add a light hearted touch to the text chat conversation.

In this study, the second most frequently used strategy in text chat is Code Switching (CS). Some Japanese words in hiragana, which are Japanese letters executed swiftly and with strokes flowing together, look similar to Chinese words that have similar meanings. The Japanese participants tended to type in hiragana to express meanings when they had trouble using English. Japanese words written in hiragana do not sound similar to Chinese, so typing in hiragana is a unique text chat strategy among Japanese and Chinese learners. Some of the Japanese participants knew the Chinese phonetic alphabet, which is the sounding system of the Chinese language. As a result, the Japanese participants had two options when using the Code Switching strategy, relying on either hiragana and similar Chinese characters, or the Chinese phonetic alphabet. The Chinese participants were found to do the same when having trouble expressing themselves in English. In some cases, the Chinese participants typed in Chinese characters and expected the Japanese participants to understand because of the close resemblance between hiragana and Chinese character. There were also times when the participants in both China and Japan felt the need to use Chinese characters to describe names of people, movies, books, and songs which were originally written in Chinese, as shown earlier in Text Chat Excerpt 17. It is worth noting that the strategy of Code Switching to Assist Meaning (CSA) is a similar strategy to Code Switching, but was
not used often in the text chats with only one cased found in the scripts. The use of Code Switching to Assist Meaning is defined as using L1 to facilitate L2 learning, in this case, using either Chinese or Japanese to improve the learning of English. However, when learners are able to successfully convey meaning by switching back to their L1s, assisting the learning of L2 with L1 may not happen very often.

The third most often used strategy in text chat is Tone Strategy (T). In text chat, the lack of visual communication tools push learners to use Tone Strategy to express feelings, similar to the use of another strategy discussed earlier, the Paralinguistic Strategy. In this study, both Chinese and Japanese participants were extremely polite in most of the text chat sessions. However, there were cases when the participants openly showed unpleasant feelings through the use of Tone Strategy, as shown in Text Chat Excerpt 19. There were no such cases found in the videoconferencing scripts and learners used polite Tone Strategy throughout the conferences. The lack of interlocutors’ presence and the confusingly inter-related topics in text chat seem to explain the difference. Another reason could be that the participants felt safe while they typed in their messages behind the computer screen, not like talking face-to-face to the interlocutors.

Different from text chat, videoconferencing provides the participants more communication channels. The participants can see and hear each other, and use slides to assist communication. In the videoconferences, the three most commonly used strategies were Fillers (F), Comprehension Check (CC), and Framing (F). The participants used Fillers to fill in the gaps in the conversation when they had trouble responding to a
question or comment immediately, thinking of ways to express themselves, on other occasions when the learners needed a little time before they could carry on the conversation. The high occurrence of the use of Fillers seems to show that oral communication was challenging to the learners. The fast flow of the conversation urged learners to respond quickly and the incompetence of using L2 to precisely express ideas hindered learners from responding fast. As a result, the participants used Fillers to delay making responses or comments and leave themselves more time for consideration. Differently, in text chat, Fillers is not among the most often used strategies. The written nature of the conversation apparently gave learners more time to think before making responses. The participants were able to organize ideas, pick the appropriate language, and decide on the tone while they were typing in their responses. Frequent use of Fillers does not appear to be necessary in text chat.

The second most frequently used strategy in videoconferencing was Comprehension Check (CC). During conversations, the participants often stopped and asked questions to check comprehension before moving on with the discussion topic. In videoconferencing, there was usually one line of topic discussed by several participants who took turns to speak. If nonunderstanding or misunderstanding remained unresolved, there was a chance that the conversation could not continue, causing the videoconference to halt. As a result, the participants tended to check comprehension very often. It was different in the text chats, where learners carried on discussions on several issues at the same time. Nonunderstanding or misunderstanding on one issue concerning one or more than one speakers could hardly affect the entire group and
cause a halt of the text chat. Another reason that the participants used Comprehension Check often in videoconferencing seemed to be that the videoconferencing system was not able to provide images of the interlocutors in a natural and timely manner as in face-to-face conversations, and the participants felt the need to check on comprehension and even on presence of their interlocutors. The participants could see each other on the TV screen while they talked, and the camera was manually controlled to focus on the speaker in a group. However, when the participants were actively participating in a discussion, the change of speakers could happen very fast and it was difficult for the camera, which was controlled by the teaching assistant of the class, to follow the speaker and zoom in to show a close image of the speaker on the TV screen. A change of focus by the camera could result in a short time blur on the TV screen, which could be confusing to the listeners, whom in turn might not be able to respond timely. The lack of timely response would then trigger the use of Comprehension Check as the speaker was not sure whether s/he should continue with the conversation.

The third most frequently used strategy in videoconferencing was the Framing Strategy (F). The participants tended to mark the ending of an old topic and the beginning of a new one with F. At the end of a meaning negotiation episode or after getting a positive answer to a comprehension check question, the participants used Framing Strategy to mark the ending of the topic and to push forward the conversation. The high occurrence of meaning negotiation and the use of CC in videoconferencing practically increased the amount of Framing Strategy. The design of the tasks in this study might also affect the use of Framing Strategy. The participants were required to
present on a topic individually before free discussions between Japanese and Chinese as a whole group. At the end of each individual presentation, the speaker tended to use F to signal the ending and lead in the next speaker. The use of F appeared to be a necessary part in the videoconferences, especially during the individual presentations. However in text chat, F was not used as often. The participants did not negotiate meaning and use CC as often as in videoconferencing. The required individual presentations were often not marked by F but intertwined with questions, comments, and even other topics among all the learners participating in the text chat.

In summary, the participants used Paralinguistic Strategy, Code Switching Strategy, and Tone Strategy most often in text chat. The written nature of text chat appeared to be the major reason that learners used these three communication strategies more often than other strategies in text chat. The need to express feelings pushed learners to use various discourse markers and different tones in the text chat, and the convenience of using Chinese helped the participants in some cases. In videoconferencing, the most often used strategies were Fillers, Comprehension Check, and Framing. The oral conversation of videoconferencing shaped learners’ choice of strategies. The participants needed time to organize and produce ideas in the oral form of L2, and frequently check comprehensions and frame the turns of speaking to make sure the single line topic continued smoothly.

A survey on the participants’ perceptions of communication strategy use in text chat and videoconferencing was carried out simultaneously at the Chinese university and the Japanese university. The survey was completed at the end of the semester
when all the text chat and videoconferencing sessions were finished. The survey questions were rooted from the 11 communication strategies that this study intends to investigate. All together 10 questions were designed to collect the learners’ responses on the use of 5 communication strategies in both text chat and videoconferencing. The reason why only 5 strategies were tested in the survey lies in the fact that some strategies, like Framing and Inferential Strategies, are hard to describe in English to match the learners’ L2 proficiency level, and would therefore cause misunderstanding. When taking the survey, the learners were asked to choose from “strongly agree”, “agree”, “disagree”, and “strongly disagree” to answer ten questions concerning strategy use in text chat and videoconferencing. Table 11 is a summary of the survey questions and the results.
Table 11

*Survey Results on Participants’ Perception on Strategy Uses in Text Chat and Videoconferencing*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Responses</td>
<td>Percentage</td>
<td>Responses</td>
<td>Percentage</td>
<td>Responses</td>
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<tr>
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<td>1</td>
<td>2.2</td>
<td>8</td>
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<tr>
<td>2</td>
<td>3</td>
<td>6.5</td>
<td>10</td>
<td>21.7</td>
<td>28</td>
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<tr>
<td>3</td>
<td>1</td>
<td>2.2</td>
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<td>6.5</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2.2</td>
<td>11</td>
<td>23.9</td>
<td>26</td>
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<tr>
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<td>2</td>
<td>4.3</td>
<td>14</td>
<td>30.4</td>
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<td>6</td>
<td>2</td>
<td>4.3</td>
<td>14</td>
<td>30.4</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>4.3</td>
<td>29</td>
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<tr>
<td>8</td>
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<td>2.2</td>
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<td>2.2</td>
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<td>9</td>
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<td>10.9</td>
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<tr>
<td>10</td>
<td>1</td>
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<td>9</td>
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</tbody>
</table>
In the survey, the participants’ use of 5 communication strategies in the two different modes was tested. The 5 strategies included Tone Strategy (Questions 1 & 2), Paralinguistic Strategy (Questions 3 & 4), Self-correction Strategy (Questions 5 & 6), Comprehension Check Strategy (Questions 7 & 8), and Appeal for Assistance Strategy (Questions 9 & 10). Most participants believed both text chat and videoconferencing encourage the use of the 5 strategies. However there were differences concerning the participants’ perceptions of strategy use and the communication modes.

For the use of Tone Strategy, most participants (80.5%) agreed or strongly agreed that text chat encourages the use of either polite or impolite tones to express feelings. The majority of the participants (71.8%) agreed or strongly agreed that videoconferencing does the same.

The participants’ opinions on how text chat and videoconferencing affect the use of Paralinguistic Strategy vary. The majority of the participants (91.3%) either agreed or strongly agreed that text chat encourages the use of non-verbal expression, while not that many (73.9%) agreed or strongly agreed videoconferencing encourages the use of gestures or body movement, which are also non-verbal expressions. Even though the difference between the answers of the two groups is small, there is a tendency that the participants used Paralinguistic Strategy more often in text chat than in videoconferencing. Discourse analysis shows that the participants did use Paralinguistic Strategy the most in text chat (see Table 9 for strategy use in text chat) but not so in videoconferencing (see Table 10 for strategy use in videoconferencing). Apparently the reduced sensory nature of text chat urged the participants to use various Paralinguistic
Strategies to express ideas and feelings, and the written nature further encourages the participants to use discourse markers that they can create through the keyboard.

When asked about Self Correction Strategy, the number of participants who agreed or strongly agreed that text chat encourages them to correct their own mistakes is the same (65.2%) with the amount of participants who agreed or strongly agreed that videoconferencing can do so.

As for Comprehension Check Strategy, the majority of the participants (95.6%) either agreed or strongly agreed that text chat encourages them to check for understanding, and the same amount of learners agreed or strongly agreed that videoconferencing is supportive to comprehension check.

More the participants (89.1%) agreed or strongly agreed that text chat supports the use of Appeal for Assistance Strategy, fewer participants (77.8%) agreed or strongly agreed that videoconferencing does the same.

In summary, the participants agree that both text chat and videoconferencing encourage them to use the five communication strategies: Tone Strategy, Paralinguistic Strategy, Self Correction Strategy, Comprehension Check Strategy, and Appeal for Assistance Strategy. It is worth noting that the opinions on the use of Paralinguistic Strategy vary, and more participants believed text chat encourages the use of non-verbal strategies. The result corroborates the discourse analysis that text chat strongly encourages the use of Paralinguistic Strategy.
CHAPTER V

DISCUSSION OF RESULTS

How Do Negotiation Routines in Text Chat Compare to Those in Videoconferencing

The findings show that negotiation of meaning occurs in both text chat and videoconferencing. Negotiation in the two modes share similarities as well as differences. A major similarity appeared to be an emphasis on fluency rather than accuracy in both text chat and videoconferencing conversations. The differences included the amount of negotiation, the major trigger types, and learners’ turn-taking behaviors.

As two modes of CMC, text chat and videoconferencing both seemed to encourage fluency but not accuracy. This finding is in line with a number of CMC studies (see Lee, 2008 for a summary of studies). The participants negotiated over lexical and content problems the most, whereas syntactical errors were ignored. In this study, grammatical forms were not negotiated in either text chat or videoconferencing. The participants did not pick up grammatical errors because understanding was not affected. Gass (1997) notes that semantic comprehension usually precedes syntactic comprehension during information exchange. Lee (2008) points that learners may not
be cognitively capable to pay attention to the meaning and the form simultaneously.

Thus, the participants might not attend to the form during meaning-oriented exchanges. Other possible reasons may be the task type and the participants’ inability to attend to syntactic errors during the opinion exchange task. Smith (2003a) studied meaning negotiation with two task types, jigsaw and decision-making, and found that task type plays a role in meaning negotiation in text chat as learners negotiated over lexical items more often in the jigsaw task than in the decision-making task. According to Pica et al.’s (1993) task typology, the opinion exchange task used in this research is similar to the decision-making task, thus may not encourage negotiation over lexical errors. The free discussion task for both text chat and videoconferencing did not require learners to use specific syntactical forms or lexical items to express meanings. As a result, learners focused more on meaning exchange. In this study, the participants in China and Japan had similar problems with English grammar. They did not to attend to syntactic errors in the conversations. A typical example is that both the Chinese and Japanese participants tended to ignore mistakes in the use of verb tenses, and very few meaning negotiation episodes were caused by nonunderstanding of verb tenses. The reason lies in the fact that Chinese and Japanese languages do not express tenses through the form of the verb but through the use of adverbials and time indicators, like just now, yesterday, now, in the future, etc. The Chinese and the Japanese participants usually had problems with the use of English verb tenses and they seldom picked up verb tense errors in the talk of their partners.
The participants negotiated meanings more often in videoconferencing than in text chat. In videoconferencing, 28.35% of all the turns were negotiated turns, while in text chat, only 5.14% of the total turns were negotiated turns. This finding suggests that compared to text chat, videoconferencing provokes more nonunderstanding and provides more opportunities for meaning negotiation. The finding is consistent with the results from Yamada and Akahori’s (2007) study. Yamada and Akahori (2007) compared four different modes of CMC, including text chat and videoconferencing. Among the four modes of CMC, videoconferencing yielded the greatest number of meaning negotiation. This finding suggests that videoconferencing facilitates meaning negotiation more effectively than text chat. In the current research, videoconferencing provoked more meaning negotiation episodes, yet, the videoconferencing conversations were less smooth and more frequently interrupted by understanding problems. It is therefore important to study the triggers of nonunderstanding in videoconferencing and why such triggers did not cause high frequency of meaning negotiation in text chat.

In videoconferencing, most triggers (62.14%) were content related. According to the task design, the majority of the topics for both text chat and videoconferencing were culture related. Difficulties in understanding cultural differences appear to be a major problem in videoconferencing among the Chinese and Japanese subjects. However, in this study, culture related problems did not trigger as many negotiations in text chat (41.67%). The participants tended to begin text chats with pre-determined topics, which were often culture related, but then drifted away talking about other topics that were interesting to them. As a result, culture related issues caused less
nonunderstanding in text chat, and the text chat conversations were smoother than that of the videoconferencing. It is reported that intercultural contact though either synchronous or asynchronous techniques can contribute to the development of intercultural communicative competence and learners’ own culture awareness (O’Dowd, 2007; Liaw, 2006; Zeiss & Isabelli-Garcia, 2005). Results of the current study are consistent with the findings. In both text chat and videoconferencing, subjects negotiate meanings when they have difficulties with culture-related issues and the negotiation promotes intercultural communicative competence. However, in videoconferencing, the high frequency of nonunderstanding caused by culture-related issues indicated a less engaging conversation environment as the subjects need to stop frequently to negotiate meaning. O’Dowd (2007) warns teachers that the success of intercultural exchange via synchronous or asynchronous technologies depends on the appropriate integration into the language classroom. Too much negotiation on culture-related issues may switch learners’ attention from lexical acquisition to culture awareness, and encourage fluency over accuracy. More importantly, frequent nonunderstanding on culture-related issues may frustrate learners and decrease learners’ interest in cross cultural communication. In the current study, there was no native speaker of English involved and the participants do not share a common first language. Such a design is different from the typical culture-exchange studies in which the participants try to learn each other’s native languages, or one side helps the other side, such as the research done by Liaw (2006). In Liaw (2006)’s study, a group of Taiwanese learners worked with a group of American college students to comment on articles about Chinese culture on
an online forum. The American students helped the Taiwanese learners to learn English, so the forum entries were in English. The result shows that the Taiwanese learners were able to demonstrate intercultural competence in their forum entries. No frustration and decrease of interest were reported. Compared to Liaw’s (2006) research, the current study indicates that cross-cultural videoconferencing between learners of different L1s can cause frequent nonunderstanding and may frustrate learners, yet participation of native speakers of English seems to be an appropriate way to promote learners’ interest especially with culture-related topics.

In contrast to videoconferencing, nonunderstanding of the content triggered 41.67% of the meaning negotiation in text chat. The participants tended to drift away from the pre-decided culture-related topics and talked about other issues, like daily life, popular music, and movies stars, which were usually familiar topics to both sides. The change of topics may partially explain why the text chat conversations are not interrupted by content problems as frequent as in videoconferencing. It is worth noting that compared to videoconferencing, text chat seems to provide the participants a more flexible environment and freedom to change topics. This finding is consistent with studies on text chat and foreign language anxiety that text chat creates a less stressful learning environment (Roed, 2003; Bradley & Lomicka, 2000), and lowers communication apprehension. Horwitz et al (1986) defines communication apprehension as difficulties speaking with a partner or in groups, stage fright and receiver anxiety. Text chat provides the subjects the opportunities to communicate behind a “shield from being on-stage” (Bradley & Lomicka, 2000, p. 362) since the
conversations are typed in and the participants do not see the images of each other. As a result, text chat creates a less stressful environment and decreases learner anxiety.

Videoconferencing apparently does not provide such a behind-the-stage shield and the fast flow of the oral conversation requests require that learners respond promptly. These differences between text chat and videoconferencing may explain why the participants followed the pre-decided topics in videoconferencing but frequently changed topics in text chat. As noted earlier, the pre-decided topics were typically culture issues, which are difficult to explain, the videoconferencing conversations therefore yield more meaning negotiation episodes than the text chat conversations. It is worth noting that videoconferencing may induce a new form of language classroom anxiety (Kinginger, 1998), and may not be an ideal tool for cross cultural communication in the L2 classroom. Compared to videoconferencing, the current study suggests that text chat may better serve L2 learner, especially in cross-cultural communication activities.

Besides content problems, meaning negotiation in videoconferencing is also pronunciation related (6.80%). As explained in Chapter 4, triggers that were classified as “content” might also be related to learners’ accents and the speed of talking. The audio channel in videoconferencing appeared to be distracting, and the typed text in text chat, on the other hand, seemed to better facilitate communication among the Chinese and Japanese participants, who are usually sensitive of their accents and pronunciation problems when speaking English. It is important to study the learners’ perception of their pronunciation problems and the strategies they use to overcome pronunciation
difficulties. Little research deals with pronunciation problems in videoconferencing. Derwing and Rossiter’s (2002) study on learner perception of pronunciation issues in oral conversation may shed light on the videoconferencing research. In their study, 55 out of 100 adult ESL learners perceived that pronunciation was a contributing factor to their communication problems, and 39 out of the 100 learners could not identify specific areas of their pronunciation difficulty. It seems that learners believe pronunciation is a problem in oral communication, yet they are not clear about their own pronunciation difficulties. The current research proves the findings of Derwing and Rossiter’s (2002) as in videoconferencing, the conversation was often interrupted by content triggers (62.14%), some of which may also be pronunciation triggers as explained in Chapter 4, and also pronunciation triggers (6.80%). The participants stop the conversation to negotiate meaning because they have noticed the problem caused by pronunciation problems. However, the negotiation over pronunciation issues can also be a sign of not being able to identify and overcome one’s own pronunciation difficulties and that of the interlocutors. For example, as shown in the videoconferencing scripts, the Chinese participants had trouble pronouncing “th” and a pronunciation problem that the Japanese participants had was to distinguish “l” from “r”. Not being able to identify typical problems like these, the Chinese and the Japanese participants frequently stopped their conversation to check with each other. Further study is needed on L2 pronunciation and how it affects videoconferencing.

In contrast to videoconferencing, text chat does not provide audio and video channels, thus yielding different types of triggers. Most of the triggers (47.22%) in text
chat are lexical ones. Compared to videoconferencing, text chat affords more opportunities to focus attention on linguistic form (Warschauer & Kern, 2000; Chapelle, 2001; Smith, 2004). The written discourse allows language learners to read the script, thus lexical errors can be easily picked up. Text chat also provides language learners more processing time and conversation scripts can be easily retrieved by using the vertical scroll bar. As a result, nonunderstanding is often attended to while the conversation continues. In videoconferencing, the oral conversation does not allow language learners to read the script. Finding lexical errors in the oral conversation may not be easy. Compared to videoconferencing, text chat appears to be a better tool in promoting lexical acquisition. These findings are consistent with research on text chat that text chat encourages learners to focus on language form and notice lexical mistakes (Lai & Zhao, 2006; Shekary & Tahririan, 2006; Pellettieri, 2000; Warschauer & Kern, 2000). Little research is found on lexical acquisition and videoconferencing. Future research should look for practical ways to improve learners’ lexical acquisition in videoconferencing.

Language learners’ turn taking behaviors in text chat are different from those in videoconferencing. Smith (2004) mentions that turn taking in CMC is different from that in face-to-face communication activities. Findings in this study show that turn-taking usually is not clearly marked and may cause confusion in text chat, but is often clearly indicated in videoconferencing, causing less confusion. In text chat, several lines of a topic co-exist and the conversation topics are intertwined. The text chat system allows multiple language learners to type and send messages simultaneously. When the
learner presses the “enter” key, his/her message is sent and displayed on the computer screen of all the participants. Messages are displayed in the order that they have been sent. It is possible that several learners type and send messages at nearly the same time. A learner can respond to more than one topic within one turn of speech. The mixed topics often cause confusion and nonunderstanding. In the current study, 5 participants on each side were scheduled to attend a text chat session. Even though there was absence almost every time and the total number of text chat participants was usually less than 10, the conversation could still be chaotic with several learners “talking” at the same time. Controlling the number of participants at a text chat session appears to be necessary. Research shows that pairing up two L2 learners (as in Smith, 2004) or one L2 learner with one native speaker (as in Lee, 2008) does not seem to cause turn-taking problems in text chat. However, hardware facilities for text chat, like CUSeeMe, MSN, and Skype, normally allow more than two people chatting in one virtual chat room, and including multiple learners at one chat session is economical for big classes. There is very little research on the maximum number of participants that a text chat allows and how to reduce the turn-taking confusion when multiple learners attending a text chat. It is necessary for future research to study the appropriate group size for text chat and how the number of participants affects learners’ chatting behavior.

In terms of turn taking, videoconferencing resembles face-to-face conversation in that normally only one speaker talks at a time on one topic, even though multiple interlocutors participated in the talk. It is unique in videoconferencing that the participants tended to mark the shift of turns very clearly, usually through the use of
Framing Strategy, which will be discussed later on in this chapter. Possible reasons could be that the video camera was not flexible enough to capture and focus on each speaker and all the members in the audience in a timely manner during the fast flowing conversation. As a result, at the end of a turn or a topic, the speaker might have trouble knowing the responses of the audience, and would then need to clearly mark the ending of the old turn or topic and the beginning of the new ones. Technically the clearly marked turn taking was also a signal to the camera operator, usually the teaching assistant, to shift focus. The clearly marked turn taking in videoconferencing seems to show a sense of regulation and distance between the two sides, whereas the mixed turns and topics in text chat appear to create a more informal and relaxed atmosphere, giving learners opportunities to express ideas more freely, even on more than one topic at a time. The camera mediated conversation seems to create a sense of distance, though learners can see and hear each other. It is inferred that videoconferencing more closely resembles face-to-face conversation in the sense that learners tend to clearly mark the opening and closing of a turn.

In summary, the participants negotiate meaning in both text chat and videoconferencing. The negotiation is never triggered by syntactical errors, indicating that text chat and videoconferencing communications may promote fluency but not accuracy. The negotiation routines in the two modes appear to be different. In text chat, lexical problems trigger most of negotiations and discussion topics are intertwined. In videoconferencing, triggers are often pronunciation related and turn taking is clearly marked. Text chat appears to be a better tool for lexical acquisition. Videoconferencing
conversations can easily be distracted by pronunciation problems and seem to bear a
sense of distance among the participants.

**How Do Communication Strategies NNS Use in Text Chat Compare to Those in Videoconferencing**

Results show that the participants used similar communication strategies in text
chat and videoconferencing. In videoconferencing, the participants used eleven
communication strategies, including:

- Framing
- Tone
- Paralinguistic Strategy
- Message Abandonment
- Code Switching
- Code Switching to Assist Meaning
- Comprehension Check
- Inferential Strategy
- Fillers
- Appeal for Assistance
- Self-correction

In text chat, except for Message Abandonment and Appeal for Assistance, all the
other nine strategies were used. In text chat, the most often used strategy is
Paralinguistic Strategy (222 cases), whereas in videoconferencing, the most often
used strategy is Fillers Strategy (296 cases). The participants’ choice of strategy use
is affected by the communication mode. Text chat and videoconferencing communications shape learners’ strategy use and create the differences in favored strategies.

Paralinguistic Strategy is the most often used strategy in text chat and is also used in videoconferencing. Results from both the discourse analysis and the survey show that the participants used nonverbal expressions extremely often in text chat. The findings corroborate those found by Lee (2002b) that symbolized discourse markers in text chat function in a similar way to non-verbal negotiation strategies that facilitate interaction. The reduced sensory nature of text chat urged the participants to use established discourse markers or create new ones to express sophisticated feelings and emotions when they had trouble expressing them verbally. For example, in text chat, since the participants could not see each other while they chatted, they tended to use emoticons to express feelings. Using nonverbal expressions in text chat might even save time and speed up the conversation. With one click on the keyboard, a question mark can appear on the screen, meaning “Why?”, “I don’t understand.” “Really?” etc., depending on the context.

In videoconferencing, facial expressions, gestures, and body movements are major types of the Paralinguistic Strategy. Besides that, the participants were found to use writing tools to facilitate video communication. Zähner et al (2000) note that videoconferencing requires a writing tool shared by the participants, like a writing board, in order to maximize its potential. Results of the current study support Zähner et al (2000) notion that the participants used various writing tools to help express meaning.
Examples include using PowerPoint presentations to describe difficult concepts and lexical items, and showing notes to the video camera. Spelling out difficult words is a unique strategy found in videoconferencing. Instead of writing a difficult word on a piece of paper and showing the paper to the camera, the participants tended to orally spell out the word. This strategy also falls into the writing tool category.

In summary, the use of Paralinguistic Strategy with discourse markers in text chat and non-verbal expressions in videoconferencing promote comprehension of ideas and feelings. However, the frequent use of Paralinguistic Strategy in both text chat and videoconferencing could be a sign of less verbal communication and a tendency of emphasizing fluency but not accuracy. Future studies should try to find out the value of the use of Paralinguistic Strategy on the development of learners’ language competence.

The participants used L1 as Code Switching Strategy to facilitate communication in both text chat and videoconferencing. Findings of this study corroborate earlier studies on using L1 as a mediating tool in L2 communication activities (see Lee, 2008 for a summary of studies) that language learners tend to use L1 for the establishment of mutual engagement and support for a shared task. Lee (2008) notes that the use of L1 as a mediating tool may be necessary for cognitively demanding tasks. In the text chat and videoconferencing communications, the participants were challenged to interact real-time with NNS from a different country, using L2 as the working language. The task was cognitively demanding, concerning the fact that both the Chinese and the Japanese participants were not trained to use L2 in real life settings, and they did not share a native language and cultural background. The similarities of Japanese hiragana and
Chinese characters provided the learners a tool to accomplish the demanding task of text chat. With the help of L1 (Japanese hiragana and Chinese characters), the participants were able to work collaboratively to construct knowledge on L2 and other issues related to the two cultures, as well as providing feedback to each other to maintain the natural flow of the conversations. Findings of this study support the constructivist claim that CMC activities, like text chat and videoconferencing, create a collective scaffolding learning environment for learners to exchange information through social interaction (Warschauer, 1997). Transcription of the text chats and videoconferences yields similar findings as in Maushak and Ou’s (2007) and Martha et al (2000) reports that synchronous communication facilitates online collaboration since online collaboration happens when language learners communicate online. In both text chat and videoconferencing, language learners not only exchange ideas and thoughts, but also negotiate with each other to construct new knowledge. In this study, the use of Japanese hiragana and Chinese characters is a strategy to convey meaning and build new knowledge upon the old. Future research should focus on the effectiveness of using L1 as a tool for collaboration and cooperation in the L2 classroom.

Tone Strategy was used frequently in text chat and also found in videoconferencing. The participants tended to use a very polite tone in both text chat and videoconferencing. The high frequency of using the polite tone in text chat can be partially explained by Smith’s (2003b) cooperation principle. Smith notes that because of the reduced sensory nature, text chat is more challenging than oral interaction in that language learners need detective work in interpreting their interlocutor’s incoming
messages as the clues helping the listener interpret meaning are fewer. Without visual clues, most of the times learners need to predict their interlocutors’ mood and emotion, which in a sense affect what their interlocutors will “say”. One way to ensure that the listener is actively engaged in the text chat conversation is to be explicitly polite (Smith, 2003b). Results show that in this study, the participants tended to be very polite in text chat even when they had trouble understanding each other, or when meaning negotiation failed to solve their problems. Smith’s (2003b) cooperation principle does not seem to fully explain the situation in this study. Besides, learners frequently used the polite tone in videoconferencing as well, and videoconferencing does provide learners the visual tool. The reason can possibly be related to the cultural and gender backgrounds of the learners. Asian cultures encourage listening to others and discourage public discussion of feelings, especially unpleasant feelings or disagreements (Hong-Nam & Leavell, 2006). As the subjects in this study are Chinese and Japanese, their upbringing and school experiences might have impacted their behavior in the text chats and videoconferences, thus they tended to be extremely polite in both the text chat and videoconferencing discussions. The participants were found giving up stressful meaning negotiations, not indicating nonunderstanding, and avoiding challenging topics. These behaviors can be related to learners’ cultural backgrounds. It is also reported that the Chinese and the Japanese learners had cultural stereotypes on each other and were refrained from impolite behaviors because of the stereotypes. Itakura (2004) reports the cultural stereotypes among Japanese and Hong Kong ESL learners in an email exchange project. Findings show that Japanese are typically stereotyped by Chinese as
polite, strict, and hard working, while Chinese, especially Chinese women, are
classically stereotyped by Japanese as polite and career-oriented. Consistent to Itakura’s (2004)
findings, the Chinese and the Japanese participants in this study seem to believe that
their overseas partners are naturally polite, and therefore they should be polite as well.
Longitudinal research is needed to examine learners’ behavior and whether they will
validate and modify their assumptions about the other culture after knowing more
about each other personally. In cross-cultural communication activities, teachers should
be reminded about the cultural stereotypes and how they affect learning. Besides
cultural stereotypes, learners’ gender may also play a role in the use of Tone Strategy,
especially with the polite tone. In this study, all the Chinese participants were female,
while the majority (19 out of 28) of the Japanese participants was male. The gender
difference between the two groups appears to be related to the difference between the
academic majors of the two groups, as there are normally more female learners
majoring in English Education in China, and more male learners majoring in Politics and
Economics in Japan. Apparently the participants were very polite when communicating
with learners of the opposite gender, and the difference in the participants’ academic
majors might also play a role. More research is needed to investigate whether gender
and major differences affect learners’ use of tones in on-line cross-cultural
communications.

In summary, both text chat and videoconferencing encourage the use of various
communication strategies, and using the strategies facilitates communication in the two
different modes.
How Do Text Chat and Videoconferencing Shape Meaning Negotiation and Use of Communication Strategies

Text chat and videoconferencing are found to shape meaning negotiation and learners’ use of communication strategies. Text chat encourages attention on linguistic forms, whereas videoconferencing amplifies learners’ pronunciation problems. In terms of strategy use, text chat provides opportunities to use discourse markers as a paralinguistic strategy, and videoconferencing pushes learners to use fillers most frequently. As a result, both text chat and videoconferencing can be useful tools in the SLA classroom, but compared to videoconferencing, text chat better facilitates the learning of linguistic forms. Teachers should consider the goals of the L2 class when choosing an online learning mode.

Findings show that the written discourse of text chat enables learners to focus on the linguistic form. Language learners can read the conversation scripts when needed and have time to organize thoughts before typing in responses. These functions of text chat amplify learners’ attention to linguistic form. In text chat, lexical problems triggered most of the nonunderstanding and meaning negotiations. This indicates that text chat is a better tool in promoting lexical acquisition. Videoconferencing, on the other hand, provides audio and visual channels, yet the communication can be frequently interrupted by pronunciation problems, and learners can hardly focus their attention on the learning of linguistic forms.

In videoconferencing, meaning negotiations were most often triggered by content problems. However, pronunciation problems also triggered nonunderstanding.
and sometimes it was difficult to distinguish pronunciation triggers from content triggers. Apparently mispronunciation, strong accents, and fast talking speed caused nonunderstanding and became major problems in videoconferencing. The audio and video nature of videoconferencing seem to challenge learners with accents, even though the learners might be competent in the written form of L2. This finding is consistent with Yamada and Akahori (2007) that videoconferencing provides ample opportunities for meaning negotiation, yet as noted by Jepson (2005), the value of videoconferencing needs to be further studied in regard to the distracting pronunciation errors and accents. For Chinese and Japanese learners, who normally speak English with accents, videoconferencing may not be an appropriate tool in the language classroom, and can be challenging as videoconferencing conversation requires spontaneous oral response.

Text chat and videoconferencing shape the use of communication strategies. In text chat, the participants used discourse markers as Paralinguistic Strategy the most. The reduced sensory nature of text chat pushed learners to use discourse markers to express feelings. Emoticons were frequently used in the text chat conversation. The participants designed emoticons by themselves to express subtle feelings. Unique designs became popular and spread quickly among the learners. Apparently the lack of sensory tools does not significantly reduce the expression of feelings, and learners can easily find ways to compensate the loss. The concern here is whether the use of discourse markers affects language acquisition, as learners can express certain ideas
without lexical expressions. Further study is needed on how to encourage learners to focus on practicing English language in text chat.

The participants used Fillers Strategy the most in the videoconferencing conversations. The audio and video communication channels at videoconferencing urge learners to make spontaneous oral responses. Learners need to organize ideas and pick the right language forms while they are talking. Delay in this process produces gaps in the conversation. As a result, Fillers Strategy was frequently used in videoconferencing. Compared to videoconferencing, text chat allows learners more time before making a statement, and the conversation appears to be smooth.

In summary, text chat and videoconferencing shape the meaning negotiation routines and the use of communication strategies. Findings suggest that text chat appears to be a better tool in promoting lexical acquisition, and videoconferencing seems to be challenging to learners with pronunciation problems or strong accents. The participants’ use of communication strategies indicates that with limited communication channels, text chat can still support the expression of feelings through discourse markers.

What Should Teachers Know About Meaning Negotiation and Communication Strategy Use in Text Chat and Videoconferencing in Order to Improve SLA Teaching and Learning with Technology

From an interactionist perspective, both text chat and videoconferencing are supportive to SLA, as they provide learners opportunities for language acquisition and cultural awareness through interaction. Language learners negotiate meaning and use
communication strategies in order to facilitate exchange of meanings in text chat and videoconferencing. These behaviors fit into the collaboration and cooperation theories of Warschauer’s (1997) that learners learn a language during “computer-mediated collaborative language learning” (p.470), and echo Vygotsky’s (1978) socio-cultural approach to language learning. During the process of interaction, learners of various cultural backgrounds have opportunities to interact with each other and to gain insights into the values of the foreign culture. Text chat and videoconferencing are both important tools to increase learners’ intercultural competence. They are extremely valuable to Chinese and Japanese learners who otherwise would not have many opportunities to meet and interact with learners of different cultural backgrounds.

From a pedagogical point of view, the study leads to several observations:

**Text Chat Promotes Lexical Acquisition Better Than Videoconferencing**

Compared to videoconferencing, text chat appears to be a better tool in promoting lexical acquisition. Findings of this study corroborate other text-based CMC researches that text chat creates affordable learning conditions to support meaning-oriented communication as well as form-focus reflection (Lee, 2002a; Pellettieri, 2000; Smith 2004; Ware & O’Dowd, 2008). In countries like China and Japan, the rapid growth of computer technology and the use of the Internet provide teachers with new affordable tools of teaching L2 in real-life settings. Both text chat and videoconferencing are able to improve lexical acquisition. Lexical problems trigger most of the negotiation in text chat and some negotiation in videoconferencing, indicating the potential of using text chat and videoconferencing to facilitate the form-focused L2
learning. The tasks in this study are not designed to focus on lexical acquisition, and the researcher did not have control over the tasks, which are a part of an ongoing course offered at the Chinese and the Japanese universities. However, the results of the text chat analysis support other text chat studies focusing on lexical acquisition (see Smith, 2003a, Smith, 2004; Lee, 2008) that synchronous text chat has the potential of promoting lexical acquisition as chatting induces meaning negotiation. The text chat analysis proves Toyoda and Harrison’s (2002) claim that synchronous chatting between learners of different L1s can encourage meaning negotiation even when the task is not designed to focus on lexical acquisition. It is worth noting that text chat appears to encourage the use of nonverbal strategies, which can be a sign of less attention on lexical acquisition. Further study is needed on task design in text chat and the relationship between the use of nonverbal communication strategies and lexical acquisition.

Videoconferencing, on the other hand, may bring problems to the classroom when the goal of the course is to facilitate language development, especially for Chinese and Japanese learners. Chinese and Japanese learners usually have pronunciation errors or accents when speaking English, even though they may be proficient enough to pass standardized written exams in English. Videoconferencing amplifies the pronunciation errors and accents, which may cause nonunderstanding or misunderstanding. As a result, videoconferencing between the Chinese and the Japanese participants was not smooth most of the time, and the participants were sometimes frustrated. A better way to use videoconferencing would be between non-
native speakers and native speakers. That way, the native speakers can help the non-native speakers with the pronunciation errors or accents.

**Learners Need to Focus on L2 Form**

Learners should be advised to focus on the L2 form during the meaning oriented text chat and videoconferencing discussions. Synchronous CMC, including text chat and videoconferencing, are believed to encourage fluency rather than accuracy (Lee, 2008). However, grammatical accuracy should be equally important, especially for learners in China and Japan who will need to take written exams on grammar, like the TOEFL (Test of English as a Foreign Language), as part of the requirements to find jobs or to study overseas.

**Instructor Need to Create Activities to Practice L2 Form**

Instructors should design activities to guarantee a focus on language form in both text chat and videoconferencing. This aligns with Smith (2003a) who concludes that task type affects lexical acquisition in CMC and Lee (2008) who claims that it is important for instructors to create appropriate awareness-raising activities in order to guarantee a focus on form during meaning-oriented interaction in CMC. Real time cross-cultural communication activities can be exciting to learners and it is understandable that learners pay less attention or even ignore lexical and grammatical development when engaging in the communication activities. Even though the difficulties in understanding each other can trigger meaning negotiation (Toyoda and Harrison, 2002), the instructor needs to choose activities that focus on language acquisition, which is the major goal in the L2 classroom. Free discussions on real life
issues require learners to ask and answer meaningful questions and exchange authentic information. According to Nunan (1989), free discussions are authentic but not pedagogical in nature, and should be encouraged. More recent research on task based CMC claims that discussions seeded with lexical items can draw learners’ attention to the target lexical items while they attend primarily to meaning exchange (Smith, 2003a). According to Pica et al.’s (1993) task typology, tasks ranging from jigsaw to decision making can elicit learners’ noticing of the language form, if properly designed. Learners’ noticing is believed to be an important cognitive construct and plays a crucial role in SLA (Schmidt, 2001). Lai and Zhao (2006) find that text chat more effectively promotes learners’ noticing of their own problematic language production than face-to-face conversations. Compared to videoconferencing, text chat can better promote noticing, since most triggers are lexical ones in the text chat conversations. That means the participants were able to pick up problematic language forms and negotiate the meanings with their partners in the text chat conversation. Further study is needed to design appropriate text chat tasks in order to promote learners’ noticing on the language form.

**Text Chat and Videoconferencing as Effective Tools for Cross-Cultural Communication**

Both text chat and videoconferencing appear to be effective tools for cross-cultural communication, especially for learners who otherwise would not have ways to do so. In China and Japan, learners do not normally have opportunities to communicate with people of other cultures. Through text chat and videoconferencing, Chinese and Japanese learners engage in real time communication, which is proved to contribute to
the development of intercultural communicative competence (O’Dowd, 2007). The teaching of culture can be integrated into the L2 classroom via text chat and videoconferencing. Text chat and videoconferencing may become inexpensive ways to gain real life experience of a foreign culture. However, teachers should be aware that cultural differences and stereotypes may affect text chat and videoconferencing communications. Before and after text chat and videoconferencing communications, learners should be encouraged to study the foreign culture as well as their own culture, and to modify their assumptions about the foreign culture.

In conclusion, the findings suggest that text chat and videoconferencing have the potential to support SLA through meaning negotiation and using communication strategies. From an interactivist perspective (Long, 1985, 1996), SLA happens in synchronous CMC activities, as these activities provide learners opportunities to negotiate meaning and to acquire language rules through the negotiation. Through text chat and videoconferencing, learners not only practice the language forms and grammatical structures of L2, but also interact with their overseas partners. The cooperation and collaboration provide learners opportunities to reach linguistic improvement and cultural awareness that they would not attain alone. These findings encourage the integration of the computer and the Internet technology in the language classroom. Text chat and videoconferencing, as shown in this study, are both viable tools in creating real life contexts and conditions for language learning.
CHAPTER VI
LIMITATIONS AND IMPLICATIONS

Limitations

This study has limitations. First, the free discussion task was not designed by the researcher, but a part of the class requirement of an on-going joint course offered at a Chinese and a Japanese university. Since the researcher had no control over the task, it was not possible to examine certain features of text chat and videoconferencing. For example, the participants’ progress in language proficiency after taking part in the text chats and videoconferences could not be quantitatively measured because there were no standardized assessments before and after the communication activities.

Second, participants of the study are learners taking the course, and therefore are not randomly selected. The number of participants is limited because of the course requirements. Scripts of text chats and videoconferences seem to have yielded sufficient data for discourse analysis, but the sample size and return rate on the survey on learners’ opinions towards text chat and videoconferencing was not sufficient to provide statistically significant results.
Third, the videoconferences were transcribed by the researcher. The lack of a second transcriber may affect the validity of the videoconferencing scripts. The researcher’s own language and cultural background as a native speaker of Chinese could have affected her understanding of the conversations between the Chinese and Japanese learners. In particular, pronunciation errors and accents of the Japanese participants may not have been correctly interpreted.

Fourth, learner interviews and other methods for data triangulation were not employed. Even though technology has made cross-cultural communication less difficult than before, it is still not easy to carry out research in two countries. The researcher stayed in China during the study and was not able to meet with the Japanese participants in person. The text chat and the videoconferencing data were collected from the Chinese side, and the Japanese learners submitted their survey results online.

Implications

Even though there are drawbacks and limitations, this study builds on the research of using CMC tools in the language classroom. There are several implications. First, teachers should embrace the computer technology with considerations on what the computer and the Internet can do for SLA. In the language classroom, both text chat and videoconferencing are becoming popular tools because they provide low-cost communication channels among language learners residing in various countries. In China and Japan, text chat and videoconferencing are considered valuable tools to provide learners real life settings to use English. In this sense, both text chat and videoconferencing can be a necessary part in the L2 classroom. However, as shown in

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this study, more academic research is needed to find out the potential of these tools in promoting SLA, and possible ways to evaluate learners’ language acquisition in text chat and videoconferencing.

Compared to text chat, videoconferencing is a less researched topic. The current study adds to the limited research and calls for more studies on meaning negotiation and communication strategy use in videoconferencing.

Videoconferencing apparently induced more meaning negotiation over culture related issues than text chat did. Compared to text chat, videoconferencing seems to be a better tool in promoting meaning negotiation. However, the negotiation in videoconferencing was often generated by the content of the conversation rather than lexical issues, which are directly related to language proficiency. According to Long’s (1996) Interaction Hypothesis, meaning negotiation itself promotes language acquisition, even if the negotiation is not over linguistic problems. In this sense, videoconferencing can be considered a proficient tool in the language classroom. However, as seen in this study, video conversations were not smooth and were often interrupted by pronunciation errors and accents. A more effective way to use videoconferencing would be to use it between native speakers and non-native speakers instead of among non-native speakers. The audio and video channels of videoconferencing can help nonnative speakers to mimic the pronunciation of the native speakers, and to learn the pronunciation more effectively.

Text chat does not involve visual and audio channels and therefore avoids nonunderstanding caused by pronunciation errors and accents. Learners were found
negotiating over lexical problems and culture related issues did not cause too much 
negotiation. These findings are related to the written nature of text chat, indicating that 
text chat appears to be a better tool to directly improve lexical acquisition.

The unique characteristics of text chat and videoconferencing call for different 
designs of classroom activities to meet different learning goals. If the goal of the class is 
to improve cultural awareness, as for the course studied in the current research, 
discussions via both text chat and videoconferencing seem to be appropriate activities. 
The two modes of communication can both provide opportunities for learners to get in 
touch with people from a different culture. However, if the goal of the class is to 
promote language proficiency, text chat appears to be a better choice over 
videoconferencing since it focuses the learner’s attention upon lexical acquisition. 
Teachers should be aware that text chat and videoconferencing are unique tools for 
communication and as such will serve different learning goals.

In text chat, the number of participants should be controlled in order to avoid a 
chaotic chat meeting. Future research should focus on the appropriate participant 
number in a text chat meeting. For the purpose of improving language proficiency, an 
appropriate task for text chat could be a discussion seeded with target lexical or 
syntactical items. For example, in the current study, even though the Chinese students 
majored in English Education and the Japanese students majored in Economics and 
Politics, both of the groups were very interested in each other’s culture and life styles. 
An ideal activity for a text chat could be a discussion on certain aspects of Chinese and 
Japanese culture. In the discussion, students would be required to use certain words
and English expressions. After the text chat, students can read the text chat script, find out the words and expressions they have used, and discuss with the teacher whether they have used the assigned words and expressions correctly.

Both text chat and videoconferencing have drawbacks. The lack of visual and audio channels in text chat pushes learners to rely on typing, which can be challenging to some learners. Videoconferencing, on the other hand, can be frustrating to learners with pronunciation problems or strong accents. It appears that these tools of technology can negatively affect the language classroom even though they are becoming more and more popular worldwide. Further study should look into the impact of technology in the language classroom. Teachers should be advised to take into consideration of what technology can do and what technology cannot do in terms of reaching their own teaching goals.

Another major implication relates to the fact that this study focuses on CMC communications between non-native speakers and non-native speakers. It is very rare to find CMC communication research between Chinese and Japanese learners of English, even though English is considered the most important foreign language in both China and Japan.

With the fast development of computer technology in these two countries, text chat and videoconferencing may become more popular in the Chinese and Japanese L2 classrooms. It is important to know the potential of text chat and videoconferencing to more effectively use these tools in order to significantly promote English language teaching in China and Japan.
REFERENCES


*Language Learning and Technology, 9* (3), 79-98.


APPENDICES
APPENDIX A

VIDEOCONFERRING CODING GUIDE

[ ] Brackets indicate overlapping turns. A single left bracket marks the start of the overlapped talk; a single right bracket indicates the end of the overlapped talk.

CAPITALS Capital letters indicate talk that is louder than the normal surrounding talk.

((cough)) Non-verbal behaviors are transcribed within double parentheses.

(problematic talk) Italics in parentheses signal problematic talk. There is doubt as to whether the talk in the parentheses is accurately transcribed.

([ta:tl]) The International Phonetic Alphabet is used within rackets and parentheses to indicate the pronunciation of problematic talk.

(2) Silence is represented by seconds in single.
APPENDIX B

SAMPLE TEXT CHAT SCRIPT

Length: 56 minutes

Participants:

2 Chinese learners (randomly assigned as C1 & C2)

5 Japanese learners (randomly assigned as J1, J2, J3, J4, & J5)

Note: Pseudonyms are used in the transcript.

C1 Comments:

hi!

J1 Comments:

hi----

J2 Comments:

Hi

C1 Comments:

have U ever been in china?

C2 Comments:

hi!

J2 Comments:

No

J1 Comments:

No, but I really want to.

C1 Comments:
have U learned chinese, J2?

C2 Comments :

which city do you want to go?

J2 Comments :

Sorry, I do not.

C2 Comments :

hi J4~

J1 Comments :

I want to visit Beijing

C1 Comments :

hi. J4

J1 Comments :

hi J4

J3 Comments :

Hello!

J4 Comments :

hi C2

J2 Comments :

C1, Have you ever been to Japan?

J4 Comments :

how are you doing?
C1 Comments:
no, i've never had a chance

J4 Comments:
hi all

C1 Comments:
hi, J3

J4 Comments:
hows things

J2 Comments:
Are you leaning Japanese?

C1 Comments:
no!

C2 Comments:
what is your hobby?

C1 Comments:
what do U do in Ur spare time?

J2 Comments:
playing sports.

J1 Comments:
I like listening and playing music.

C1 Comments:
what sports?
J3 Comments:
I like to play football.

J2 Comments:
I like Tennis and baseball.

J3 Comments:
how about you, C2?

J4 Comments:
i like to watch movie

C2 Comments:
i like to see cartoons

J3 Comments:
Do you know Japanese cartoons?

J5 Comments:
i love to watch Xiyangyang!

C1 Comments:
i like xiyangyang,too

J1 Comments:
what is Xiyangyang?

J5 Comments:
Xiyangyang is chinese anime isnt it?

J4 Comments:
xiyangyang????
J3 Comments:
xiangyang?

C1 Comments:
which one do U like best?

J5 Comments:
when I was in china, i watched it every day

J5 Comments:
you mean character?

C1 Comments:
yes

J5 Comments:
and also xiaofugui is interesting

J5 Comments:
i like huitailang

J3 Comments:
i want to see it.

C1 Comments:
you can see it on line

J2 Comments:
Me too.

J1 Comments:
hey explain for us, please.
C1 Comments:

it's very interesting

J5 Comments:

chinese in that anime is easy to understand

J3 Comments:

I'll try to search it on youtube.

J5 Comments:

so through that anime i learned some chinese

J5 Comments:

xiyangyang looks like Anpanman

J5 Comments:

there are also character looks like anpanman and baikinman

C2 Comments:

i think lanyangyang is very lovely and i like ONE PIECE

C1 Comments:

xiyangyang is a story about a wolf couple and some goats in a village

J3 Comments:

I see

C1 Comments:

i like lanyangyang best

J1 Comments:

i see :) thx a lot > J5
J4 Comments:
i didn't know you have your own anime in china

J5 Comments:
xiyangyang is more popular than redcrif

J4 Comments:
it must be interesting to compare japanese one and chinese

C1 Comments:
of course we have,J4

J3 Comments:
Is ONE PIECE also famous in China?

J4 Comments:
redcliff is a cartoon? i thought irs a movie

C1 Comments:
it's a movie

J4 Comments:
ita also famous in japan

J4 Comments:
i was tryign to get it

J4 Comments:
at the sho@p

J1 Comments:
I heard it's a really good movie.
J5 Comments:

i mean movie of xiyangyang and Redcrif

C2 Comments:

yes, in china many people like OP

J4 Comments:

OP?

J5 Comments:

onepeace?

C2 Comments:

one piece

J5 Comments:

piece ^^;

J2 Comments:

Do you know any other Japanese anime?

J5 Comments:

i watched Chibimaruko in china,

J5 Comments:

it called xiaowanzi(?)

J4 Comments:

i see, one piece comic books are also the best seller

C1 Comments:

conan
J4 Comments:
chibimaruko chan ^^

J4 Comments:
conan is good too

J3 Comments:
It's wonderful Japanese cartoons become famous in other countries.

J4 Comments:
i know its good to know

J4 Comments:
do you know "nana"?

C1 Comments:
一休さん

J4 Comments:
ikkyu-san,,,,

J5 Comments:
you know well!

J1 Comments:
do you really have that in China!?

J3 Comments:
oh!do you know ikkyuusan!?

J1 Comments:
that's so surprising!
C1 Comments:
why surprising?

J4 Comments:
do you watch it on TV?

C1 Comments:
yes

J5 Comments:
we dont know that anime is such popular

C2 Comments:
Doraemon is also very popular in china

C1 Comments:
it's one of the earlies japanese cartoon i've watched.

C1 Comments:
aearliest

J1 Comments:
Because i thought 一休 is kind of old stuff >C1

J4 Comments:

yea i was a kid when it was popular

J1 Comments:
Yeah I saw the anime of 一休さん when I was a elementary school student >C1

C1 Comments:
me too
J3 Comments:
I'm surprised to heard ikkyuusan was broadcasted.

C1 Comments:
oh

J2 Comments:
Which is interesting? Chinese anime or Japanese one?
C1 Comments:
both

C2 Comments:
i like chinese better

C1 Comments:
me too

J4 Comments:
what is the difference?
C1 Comments:
because culture differences

J4 Comments:
different culture makes different cartoons....

J4 Comments:
i need to watch chinese cartoons then

C1 Comments:
i can't argue with that
J4 Comments:
what do you mean?

J5 Comments:
do you know jong?

J4 Comments:
jong?

J3 Comments:
What is jong?

J5 Comments:

ノ ？
like this

J5 Comments:
is it famous in china?

C1 Comments:
i know it

J5 Comments:
i have that character's mobilefone strap ^^

J4 Comments:

???

J5 Comments:
jong is famous character in china

J5 Comments:
is it animation character?
J4 Comments:
i don't understand the character

C1 Comments:
no

J5 Comments:
hanzi like that is exist really?

C2 Comments:
do you have pet? i like dog very much

C1 Comments:
yes

J5 Comments:
thankyou

J3 Comments:
I have two cats!

J1 Comments:
I used to have a turtle

C1 Comments:
i had a dog before

J2 Comments:
I have a dog, too.

J3 Comments:
yahoo
J4 Comments:

i have a dog at home!

J5 Comments:

?

J5 Comments:

yahoo?

J3 Comments:

sorry(^); 

J4 Comments:

i’d ove to have cats!!!!

J4 Comments:

yahoo???

J3 Comments:

mistake

C2 Comments:

i saw a film named 10 Promises to my Dog

J5 Comments:

i heard that chinese people say that man shoud have bird and women shoud have dog isnt it?

C1 Comments:

i’ve never heard about it
J4 Comments:
C2 you wrote me to bbs about that movie
J4 Comments:
but i dont know it
J1 Comments:
i've never heard of the movie
J4 Comments:
i might know if its in japanese title
C2 Comments:
犬と私の十の約束

いぬとわたしだのじゅうのやくそく

J3 Comments:
Is that Japanese movie?
J5 Comments:
oh you can write japanese,
J4 Comments:
is that dog's name socks?
C2 Comments:
i find this name in the internet but i am not sure it is right .it is a japanese movie
J4 Comments:
yea its right
J5 Comments:
J4 knows well
J4 Comments:
hmm, im googling it
J5 Comments:
oooooops
J3 Comments:
What kind of movie is it?
J1 Comments:
i found it online. I knew it but haven't watched it. Was it good??
J4 Comments:
it looks good if you like dog, you will enjoy this movie
C2 Comments:
it is a story about a girl and her dog. i think it is moving
J4 Comments:
do you watch a lot of chinese movies too?
J3 Comments:
I see. I want to see it.
C2 Comments:
yes, i think most of the chinese movies are very good ~
C1 Comments:
right
J1 Comments:

which one do you recommend?

J5 Comments:

i washed xitele(?) in china, it's called walkure in japan

J5 Comments:

do you know that?

J3 Comments:

I don't see it, but I know that.

J4 Comments:

walkure???

J5 Comments:

do you know Ziburi movie? >friends in china

J4 Comments:

i only know well-known chinese movies

C2 Comments:

sorry i do not know ziburi and walkure. maybe they have different names in chinese

J5 Comments:

walkure is Xitele in china and i dont know how ziburi called in china ^^;

J5 Comments:

you have lunch yet?
C1 Comments:

no

J5 Comments:

everyday, what kind of foods do you like to eat/

J2 Comments:

Are you hungry?

C1 Comments:

not very much

J1 Comments:

by the way i 'm hungry LOL

J1 Comments:

haven't eaten anything from this morning

J3 Comments:

Did you eat lunch?

C2 Comments:

C1 Comments:

what a poor guy,J1!

J5 Comments:

i know restaurant in chinese univ closes very fast, after closing, where do you go to eat?

C1 Comments:

wait for supper time
J1 Comments:

thanks for your concern C1. but that's because i wake up too late XD

C2 Comments:

do you like chinese food

J5 Comments:

yes es

J5 Comments:

yes

J5 Comments:

especially, kaoya

C1 Comments:

what dishes have U had?

J1 Comments:

I once had 小籠包 in Chinese town in Japan

J1 Comments:

and that tasted amazing

J4 Comments:

oh i love them too!

J3 Comments:

I like 小籠包 too.
J5 Comments:

i know xiaolongbao is popular in especially shanghai, what foods is famous in beijing?

C1 Comments:

Do U feel more hungry, J1?

C2 Comments:

C1 likes sushi very much ^.^

J5 Comments:

ohhh

J5 Comments:

i love it too

J3 Comments:

What kind of sushi do you like? > C1

J1 Comments:

Yeah I'm now starving > C1

C2 Comments:

驴打滚 soybean cake

艾窝窝 Steamed rice cakes with sweet stuffing)

炒肝 Stewed Liver

糖卷果 Chinese yam and date rolls

姜丝排叉 Fried ginger slices

奶油炸糕 Fried butter cake
豌豆黄  Pea cake
蜜麻花  Ear-shaped twists with sugar
豆汁  Fermented mung bean juice
油茶  Chatang / Miancha / Youcha
馓子麻花  Crisp noodle
萨其马  Caramel treats
焦圈  Fried ring
糖火烧  Sweetened baked wheaten cake
豆馅烧饼  Bean paste cake/Subsidence fried beans

J2 Comments:
Sushi is popular foods in China?

J5 Comments:
i have also eat suhsi in china, but i feel shshi in china is a little bit different from that in japan

C2 Comments:
all those are traditional beijing snacks

J5 Comments:
i eat 糖卷果

J5 Comments:
thanks!
C2 Comments:

u are welcome~

J1 Comments:

do you eat them often? > C2

J5 Comments:

is 糖卷果 have some fruit with stick?

C1 Comments:

i am almost watering, haha

J1 Comments:

watering?

J5 Comments:

you mean "da gong"?

C2 Comments:

not often ~

C1 Comments:

i mean My mouth is watering!

C1 Comments:

haha

J5 Comments:

issee issee^^
J1 Comments:
I see because I don't eat Japanese traditional snacks often, so I just wondered how things is like in China~

J5 Comments:
wu dao kou is near by your university?

C1 Comments:
not far

J5 Comments:
i staied there when i was in beijing

J2 Comments:
About how much Chinese snack?

J5 Comments:
ha ha

C2 Comments:
do you mean the price of chinese snacks?

J2 Comments:
Yes sorry...

J5 Comments:
i think not so expensive

C2 Comments:
oh ,not very expensive , 1--10 rmb
J5 Comments:
i have coin of 1rmb now ^^

C2 Comments:
we have to leave now .bye~

J5 Comments:
oh really

J5 Comments:
i miss you

J5 Comments:
bye

J1 Comments:
Okay that was nice talking to you all

J2 Comments:
Thank you.

J1 Comments:
talk to you later then!

C1 Comments:
i am glad to talk with U

C1 Comments:
see U
APPENDIX C

SAMPLE VIDEOCONFERENCING SCRIPT

Meeting length: 1 hour 24 minutes 58 seconds

Participants:

5 Chinese, all female (randomly marked as C1, C2, C3, C4, & C5)
3 Japanese, all male (randomly marked as J1, J2, and J3)

Note: Pseudonyms are used in the transcription.

J1: Hello, my name is Daijai, I’m a student in the School of Political Science and Economy, and I’m freshman, err...my hobby is playing baseball and tennis, so

((pointing to the next student))...

J2: Hello, my name is Nakata, my hobby is soccer, nice to meet you.

J3: Hi, my name is Kanaido, my hobby is watching TV, thank you.

C((together)): Nice to meet you.

J1: Can you introduce yourselves?

C1: Ok, my name is Hao Zhon, I’m a freshman, and my, err, I major in English Education. I’m the group leader, here’re my classmates.

C2: Hello, my name is Zhong Du, just like other girls, I like doing window shopping.

(2) ((smile)) Can you hear me?

J1: Yes, yes.

C3: Hi, my name is Mo Huni, my English name is Brenda, I like skating very much.

J1: Nice to meet you.

C4: Hi, my name is Cao Yali, my hobby is listen to the music, [nice to meet you.]
J1:  [Err, could you speak louder?]

C4:  Louder? Oh, yes. Err...hi, my name is Cao Yali, my hobby is listen to the music. (2)
     Can you hear it clear?

J1:  Err... ((talking in Japanese to the other Japanese students))
    (3)

C5:  Hi, my name is Na Yu, my English name is Rainy. Err...I like...err...ride bike, and
     err...reading books.

J1:  Nice to meet you.

C5:  Nice to meet you.

J1:  ((talking in Japanese to the Japanese technician)) (2) So, would you begin your
     presentation please?
    (3)

C1:  Err...our topic is Chinese traditional clothes, you know, and, can you hear me?
     ((sound of the class bell)) Can you hear me?

J1:  Yeah ((raising thumb)).

C1:  Ok, our topic is Chinese traditional clothes, Chinese traditional clothes

J1:  Chinese traditional clothes?

C1:  Yes, err, unlike other countries, Chinese, the history, history, do you know
     history? ((asking her peers to write down the word “history”)

J1:  history?

C1:  Chinese history is divided into several parts, you know part?

J1:  ((nodding head))
C1: Ok, and, err, ((showing the word “history” on the screen))

J1: ((laughs))

C1: And the name of the part is dynasty, dynasty, the name of the time, the part time.

J1: Part?

C2: (2) Do you know dynasty?

C1: It’s a period of time, ((showing the word “dynasty” on the screen))

J1: ((talking to other Japanese students)) Dynasty...

C1: It’s the period of time, Chao Dai ((giving the Chinese translation)), (2) do you know dynasty?

C1: Ok, we’ll introduce Chinese clothes in the term of dynasty. First, we’ll give you’re a fashion show, do you know fashion, fashion show?

J1: Fashion?

C1: Fashion, fashion show ((showing the word “fashion” on slide)).

J1: Ok.

C1: ((showing a slide show of traditional Chinese clothes from the Qin Dynasty))

Could you see it clearly? It’s Qin Dynasty, (2) it’s Qin Dynasty, can you see it clearly?

J1: Yeah, is it clothes for actor?

C1: Pardon?

J1: Is it clothes for actor, or general people?

C1: No, it’s the soldier clothes, do you know soldier?
J1: Pardon?

C1: Solder, worrier.

J1: Worrier?

C1: Yes.

J1: I see, I see.

C1: And the clothes during that time is very simple, that the same, that, that, that they look the same.

J1: Yeah.

C1: The next one is Han Dynasty, and it looks more beautiful, more beautiful. The next is Weijin Dynasty, and the main color is white and black, the main color. ((showing slides of different clothes styles)) (2)

J1: Is that a helmet or a hat?

C1: Yes, they have a hat, the hat, the hat just like a horn, do you know horn?

J1: Hoon?

C1: ((talking to her peers in Chinese)) Write it down for him, h, o, r, n. ((showing word “horn” on slide)), horn,

J1: Oh, horn.

C1: ((showing pictures of various styles of Chinese clothes)) And this beautiful lady, she is a singer, you know singer, sing a song?

J1: Sorry, I can’t hear you.
C1: And the next is the Spring and Autumn War Period, the next is Tang Dynasty, almost the brightest page of Chinese traditional clothes, and this is very fashionable.

J1: Fashionable, yeah.

C1: Yeah, and this clothes is for princess, do you know princess?

J1: ((shaking head))

C1: It’s the daughter of the king, the daughter of the king.

J1: Could you tell us how to spell?

C1: Emperor, the daughter of the emperor.

J1: Emperor?

C1: The daughter of the emperor., daughter, you know daughter?

((showing the word “princess” on slide))

J1: Oh, princess.

C1: ((smile)) It’s one of the clothes for princess. The last dynasty is Qing Dynasty, it’s the emperor and the empress, the king and the queen, and this is CiXi, err... the last powerful woman, the Chinese traditional, in Chinese traditional history.

((showing more pictures)) I think you are familiar with QiBao, have you heard of that?

J1: Err...no.

C1: The cheongsam, cheongsam, have you ever heard of that?

J1: Err...no.
C1: Cheongsam, cheongsam. (3) ((writing the word down on slide)) Wait a minute.

((showing the word “cheongsam” on slide)) Have you ever heard of that?

J1: Err...err...no.

C1: It’s a pity. Ok, err, ((talking in Chinese with her peers in low voice)) (3) and the ladies have hats.

J1: Hats?

C1: Yeah, and they have high neck, do you know neck, neck?

J1: Nike?

C1: Neck, here ((pointing to her neck)).

J1: Here? ((pointing to his neck))

C1: Yes, here, neck, high neck, err, long neck, long neck.

J1: ((talking to his peer in Japanese in low voice, talk not recognizable))

C1: No, no, no, long necklace, long necklace, long collar, long collar.

J1: Excuse me?

C1: Collar,

J1: Color?

C1: Oh, no.

J1: Collar, this? ((pointing to the collar of his shirt))

C1: ((writing on the slide)) (3) Wait for a minute please.

J1: Sure.

C1: Err...let my classmates tell you something about Tang Dynasty, the detail information.
J1: What do you mean?

C1: The specific information, more information.

J1: oh.

C2: This is the Tang Dynasty. ((showing a picture of coat))

J1: Dynasty?

C2: Tang Dynasty.

J1: Tang Dynasty.

C2: Yes. There were a lot of custom, a lot of different custom in Tang, in that period, err, err, usually speaking, rich people, rich people can wear beautiful silk coats, silk.

J1: silk? Oh, silk.

C2: By contrast, err...poor people, err... don’t own a lot of money, so they can only wear some rough clothes, rough clothes.

J1: Rough clothes.

C2: Yes. Err, err...

J1: Sorry, is that made of silk? ((pointing to the picture on the slide))

C2: What?

J1: That clothes?

C2: Rich people can wear silk clothes.

J1: Rich people?
C2: Right, but poor can’t because they don’t own a lot of money. Err...second, there was also sharp difference between royal and, err, the other, the common people. Can you understand?

J1: Common?

C2: The king...the...common people.

J1: Common people, oh.

C2: Err... err... only the offspring can wear err... err...only the offspring of the king were allowed to wear yellow clothes.

J1: Yellow.

C2: Yellow clothes, yes, because they respect yellow very much, respect, respect, (esteem, esteem), they like yellow.

J1: Why they like it?

C2: Err...because it stands for power, power, and wealth.

J1: Power, I see.

C2: Also in the coat, there was a dragon, dragon.

J1: Dragon?

C2: Yes,

J1: Oh.

C2: Err... err...because they think dragon is a holly animal, it stands for the power of king, just like the color of yellow. If common people wear a coat with a dragon, perhaps they would be killed.

J1: Cute?
C2: Killed.

J1: Really!

C2: Err...because err...that means they don’t respect their king.

J1: ((looking at his peers, nodding head))

(3)

C2: Besides, they wear different sorts of clothes when they met different people.

They wear different clothes when they met different people.

J1: Could you say that again?

C2: Err...they wear different clothes when they met different people, can you understand?

J1: Sorry, no.

C2: They change clothes when they met different people

J1: They...

C2: They change clothes, do you know change? They change clothes when they met different people.

J1: When they what?

C2: They wear different clothes, clothes, they wear different clothes when they met different people.

J1: Different people?

C2: Different people, different people. (4) ((talking in Chinese with her peers, discussing if they should give up the topic)) Err... for example, err...understand?

J1: For example?
C2: For example if they met the people who is power than them, they will wear good
clothes ((showing the word “different” on slide))

J1: Good cloth, different.

C2: Yes, err...otherwise, they can wear whatever they want because the version of
rank at that period is very... obvious. (2) Can you understand me?

J1: Err...not sure.

C2: ((smile)) Err...err... that means if they met the people who is power than them,
power.

J1: I know what power mean, I think once you said do more power.

C2: Met, they met the people, meet, they met is people, who is power, is...

C1: When they meet the king.

C2: When they meet the king, they will wear good clothes, king.

J1: king, king?

C2: Yes, emperor.

J1: King or emperor?

C2: wear good clothes.

J1: Oh.

C2: otherwise they can wear whatever they want.

J1: whatever they want.

C2: Yes, err...that’s all.

J1: Thank you.\n
J2: Thank you.
((clapping hands))

C3: wait a minute, please, ((showing a picture on slide)) err... this picture is drawn by me, not very beautiful, it’s a lady, it’s a lady.

J1: Lady?

C3: Yes, Tang Dynasty. It’s a woman, err...Tang Dynasty plays the most important part in Chinese history, err... the lady in Tang has, have, err...a higher position, so they can, err...a higher position...

J1: A hair position?

C3: Higher position, people treat them err...equal, err...can you understand?

J1: People treat them equal?

C3: Yes, like men.

J1: Like worrier?

C3: Err... women are the same as men. They can wear the clothes whatever they want, err...it’s very different from now, now we think women, err... as thin as possible is beautiful, but in Tang Dynasty, the women must plump, fat, fat, fat as beauty.

J1: Fat as beauty?

C3: Yes, it stands for err...wealth, elegance, and powerful, but not too fat, plump.

J1: How fat?

((laughter from both sides))

C3: Err... like myself. Err...err.. so, the, the, the clothes they wear at that time were very thin, err... without covering their shoulder, shoulder. The short skirt, the
short skirt, showing part of the chest, like the picture, ((showing a picture of a lady on slide)) without covering, err...err... showing part of the... err... breast, breast, here ((pointing to the picture)), very open.

J1: Oh.

C3: And ((showing another picture of a face of a lady)), not very clear, err...the women has long hair, so they must, they must, err...decorate it with flowers, jewelry (2) ((smile)) hair, they have long hairs.

J1: Yeah.

C3: Err... do you know our most famous beauty in ancient China, four, four the most famous beauty?

J1: Four beauty?

C3: Err... one of them, called Yang Guifei, the wife of the king, is born in Tang Dynasty, she was the most beautiful lady in our ancient China.

J1: So, was she fat?

C3: Pardon?

J1: What is the beautiful woman fat?

C3: Yes, yes, fat enough, ((laughter from both sides)) so the people think, thought, he, she is very beautiful. Err... that’s all. Can you understand, any question?

J1: Err... I wonder, how high that hair?

C3: Err... maybe, err... twenty centimeters.

J1: Wow.

((laughter from both sides))
C3: Yes,

J1: That’s very high.

((laughter from both sides))

C4: Wait a minute. ((moving closer to the projector, showing a picture of a coat)) (5)

Look at this picture, this is the emperor’s clothes.

J1: What clothes?

C4: Emperor.

J1: Emperor.

C4: Emperor, emperor wear it when he is discuss something with office, can you understand? Officer.

J1: Yes.

C4: And this clothes is also the emperor’s clothes ((showing another picture)), can you see it clearly?

J1: Err...yes.

C4: Don’t you think it’s very beautiful?

J1: No.

((both sides laugh))

C4: And look at this picture, there are many dragon on it, ((zooming in the picture)), it’s the figure of emperor.

J1: The figure?

C4: Err... it’s a picture for emperor.

J1: Is that a fake?
C4: Pardon?
J1: Is that fake or real?
C4: It stands for emperor.
J1: Emperor.
C4: The dragon is... stands for emperor.
J1: Oh.
C4: Ok, look at this picture ((showing another picture)), it’s a picture of emperor’s mother, can you understand?
J1: Yes.
C4: I think her clothes is very beautiful.
J1: yeah.
C4: And look at this, she is wearing a beautiful hat, it is deco...decorated, decorated with many jewelry.
J1: Jewelry.
C4: Yes, that’s all.
C5: Wait a minute. ((moving closer to the projector, opening PowerPoint documents)) (6) Err... ,my topic is QiPao, Cheongsam, do you know cheongsam?
J1: No.
C5: ((smile)) Err... it’s the name of a style of clothes. (3) Err... this is...err...cheongsam, err...a kind of clothes for women, and err... this clothes have about three hundred history, has a history of three hundred years, and it has a long history,
this, this clothes, err...(3) this is the button of the clothes, like flower, the button of clothes, button.

J1: yeah.

C5: Like flower. This one is like err... bird, is that beautiful?

J1: yeah.

C5: Thank you. And this clothes has high collar, this collar, high collar.

J1: High collar, oh.

C5: Err... Qi Pao is the classic dress for Chinese women, and err... in nowadays, we also wear this clothes, lots of Chinese women like this clothes because it’s beautiful, and, err... it can make your, make our body, err.. beautiful, and, and, err...(3.0) in Chinese traditional clothes, it’s like flower...err...I want to say, err...(2.0) this clothes, the classic dress for Chinese women, can bring the elegance of Chinese tradition and elements of style, like the high color, the attractive sleeves, and...

J1: Sleeves? ((pointing to the sleeve of his own shirt))

C5: Yes, and...err...which set up the beauty of the female shape, and because of the particular charm, Qibao, err...it’s like a wonderful flower, like a wonderful flower in the Chinese fashion stand, err...err...another beauty of Qibao is that it’s made of different materials, like silk, yes, it’s made of silk, and, err... in other case, Qibao creates, creates, err...creates an impression of simple...

J1: Simple?
C5: Simple, yes... err...(2.0) ((showing pictures of different cheongsam styles)), yes, I think that’s all.

C1: Err... can you begin your presentation?

J1: Oh, err...yes. (3.0) Can you hear us?

C1: yes.

J1: We...will introduce Japanese traditional Sushi. Do you know sushi?

C1: yes, yes.

J1: Sushi is one of the traditional food in Japan...it has been eaten by people in more than one century. Sushi is very popular in usually made of a piece of shrimp or ham and some rice, and, now, I’d like to talk to introduce sushi, a particular kind of sushi made of fish...sushi makers usually make the rice base first and when you order it, he or she will make different toppings, but I don’t recommend it when you order fish sushi. Sushi is famous as an expensive food, but now, you can eat it with low price, regular price. Secondly I’m going to mention a sushi restaurant, which is called Kaidai Sushi. This is restaurant has various types of sushi and are very popular for its one particular type of sushi...it’s famous of sushi and especially for it’s special rice...I...I ‘d like to finish by introducing a particular kind of sushi, lakawa, it’s loved by not only Japanese but also other people. Last, I’d like to say I love sushi very much, so I like you to eat all types of sushi if you have a chance to visit Japan. Thank you.

J3: Do you have any questions?

C1: Err...do you often eat it?
J3: yes. I like sushi.
C2: How much...how much is it?
C1: How much is it?
J1: I like it very much.
C1: How much? Is it expensive?
J1: (3.0) Err.. two thousand yen one slice.
C1: Yen?
J1: two thousand yen each slice.
C2: Not very expensive.
C5: and [why]
J1: As for [Chinese yuan]
J1: Ok?
C5: and why it’s now cheaper than before?
J1: pardon?
C5: Why it’s now cheaper than before? Cheaper.
(3.0)
J1: Err... I don’t know, sorry. Ok?
((both sides laugh))
J1: That’s all, thank you.
J2: Can you hear me? I talk about Chinese traditional food, touba. Do you know touba?
C1&2: What?
J2: It’s err...traditional Japanese noodle.

C1: Noodle? Yes.

J2: I don’t have picture...sorry. I introduce Takayo touba. Japanese people eat it in New Year’s Eve. Even if ((talk not recognizable))... we also call it Iso touba...Iso touba has good meaning in Japan, for example, it means ...

C1: Pardon? Excuse me? Can you speak more clearly? Slowly?

J2: Err...

C3: Can you write some Japanese on the paper? The name of the food on the paper? Draw a picture.

(3.0)

C3: Are you drawing a picture?

J2: Oh, yeah, I’m drawing a picture...I’m sorry. ((showing a picture to the camera)) Can you understand?

C1: Do you put the noodle in a box?

J2: Err...not a box.

C1: Not a box?

C2: Is it a plate?

C1: Is it a plate?

J2: This noodle...err...err...it’s a basket.

C1: Basket? Yeah, very clear. Thank you.
J2:  Iso touba has good meaning in Japan...for example, we wish our life are...our life are prosperous because... (talk not recognizable) it is said that eating Iso touba can bring you one year of luck. Thank you.

J1:  Do you have any questions?

C1:  When you have wedding, what do you eat? Wedding.

J2:  Pardon?

C2:  Wedding, marriage, marriage, when people marry, what do they eat? Err... wait a minute, I’ll write it. ((writing on paper, and showing the word “wedding” to camera)) Wedding, what do people eat?

J1:  Wedding, err... (looking at J2))

J2:  Sorry, I...I don’t know.

J1:  We’re not married yet.

((students on Chinese side laugh))

C1:  When you have a party, party, what do you eat?

J2:  Pardon?

C1:  what do you eat when you have a party?

J2:  We...we eat cake...and...and beverage.

(2.0)

C1:  Do you eat rice?

J2:  Rice?

C1:  Rice.

J2:  Yeah.
J1: (nodding head)

(3.0)

C1: Ok, we have no questions.

J3: Ok, I’m going to present on Japanese fast food tradition. In Japan, food has been an important part in Japanese social life, and Japanese housewife has been taken good care of their family. They choose food not just healthy, but also expensive.

C1: Why? You mean cooking at home is expensive?

J3: Cooking food is inexpensive, inexpensive.

C1: ok.

J3: But, recently, people began not to cook at home, but to eat fast food. One statistics say 39% of Japanese eat fast food once a week. And more people eat fast food once a week or every single day. Eating fast food is not good for healthy. Fast food is usually high in fat, and agricultural chemicals, so why Japanese people began to eat much, such unhealthy food for their lives? I think there are two reasons. First, Japanese people ((not recognizable))

C1: Pardon? Excuse me.

J3: The first reason is that Japanese people do not want to cook by them. As economic grow, people are more than before and do not want to spend time in cooking. Eating fast food is more expensive than cooking but it saves time. Many Japanese people began to think that they want to spend money rather than time in cooking. And second reason is that many fast food have appear in Japan.
C1: What? Pardon?

J3 ((showing a picture of some kind of food)): Appear, many fast food have appear in Japan.

C1: Appear, appear.

J3: And...yes, and do you know that McDonald is the most popular...and, and, err...the meal taste good and the price is reasonable. Do you know McDonald?

C1: Yes.

J3: A meal in McDonald costs about 40 Chinese yuan. And Ikonouya is a kind of Japanese fast food, ((showing a picture of some kind of food)), can you see the picture?

C1: Yes, yes.

J3: It’s made of rice and meat, can you see it?

C1: Yes.

J3: Ikonouya is much cheaper than McDonald, it’s about 20 Chinese yuan.

C2: 20?

J3: 20 Chinese yuan. It has become popular because it’s healthy and it’s made of rice.

That’s the end of my presentation. Thank you.

((both sides clapping hands))

J3: Do you have questions?

C3: Do you often eat fast food?

J3: Err...yes. I go to McDonald once or twice a week.

C1: ((giggling)) It’s too often.
J3: ((smiling)) yes, and you, you don’t eat fast food often?

C1: Yes, but not that often.

J3: How often?

C1: Maybe two weeks or a month.

J3: Two months?

C1: Twice a month or once a month.

J3: ((pointing to J1)) He, he eats fast food ten times a week.

C ((together)): Ahh...that’s too much.

((both sides laugh))

C5: But you are not very fat. Do you thinner than before?

J3: Err?

C5: Do you... do you fatter than before...before eating fast food?

J3: Before?

C5: Fatter...fat.

J3: fat...yeah.

((both sides laugh))

(3.0)

C5: Err...err...do you have more boys than girls in your university?

J3: Girls?

C5: More boys than girls.

J3: What question?

C5: More boys...do you have more boys than girls in your university?
J3: Err...yes, yes, about 80% are boys and 20% are girls.

C1: we’re on the contrast, we are...in our university...we’re on the contrast.

J3: Pardon me?

C5: We have more girls than boys.

J3: More girls, right?

C5: right.

(3.0)

C5: Do you have any questions?

J3: If you don’t eat fast food often, do you cook often?

C1: No, we never cook.

((Chinese students giggle among themselves))

C1: We live in the... in the university, in the dormitory, you know dormitory?

J3: Oh, yes, you all live in the dormitory?

C1: Yes, and we eat in the eating hall, dining room.

C5: We all eat in canteen.

J3: Canteen? What’s canteen?

C1: Canteen is dining room, school dining room.

J3: What?

C5: Dining room. Wait a minute ((writing on paper and showing the phrase “dinning room” to camera))

J3: Dinning room, ok, you all eat together in the dinning room?

C5: Yes.
C2: Do you go home every day?
J3: Me?
C2: Yes.
J3: Yeah, I go, taking two and a half hours, every day.
C2: Long distance.
J3: Yes, long distance.
C2: But why, why don’t you live in...in school?
J3: Living with parents is cheaper than living in school...living in an apartment in
  Tokyo is really expensive.
C1: How do you go to school, by bus?
J3: It’s expensive...it’s about 3,000 Chinese yuan by month.
C1: Ahh, that’s very expensive. Err...how do you go to school?
J3: Oh, err...by train.
C3: Train? By train every day?
J3: Every day.
C5: Do you go home...err... do most of you go home every day?
C2: We mean, the other two is like you?
C1: Ahh, you must be very rich.
J2: I live alone.
C1: Alone? Rent a house?
J2: What?
C1: Rent a house.

J2: ((nodding head))

C1: ((showing to camera the word “rent”)) Do you rent a house in school?

J2: Yes.

C1: Is it cheaper than living in the dormitory?

J3: Living in dormitory is cheaper than living in an apartment.

C1: Pardon?

J3: Living in dormitory is cheaper than living alone, but the number of dormitory is limited, so...

C1: Ahh, I see.

C5: Do you have any questions?

J3: Err...err...

C5: How many people, how many students live in one dormitory?

J3: Maybe 40 thousand.

C1: Oh, no, 40 thousand!

C5: How many students live in one dormitory, in one room?

J3: One dormitory? Err...not sure...maybe 1 to 200.

C5: What?

C1: In one dorm, one room.

J3: One what?

C1: One room, how many people in one room?

J3: how many people in one room? I don’t know. How about you?
C1: Eight.
J3: Eight in one room?
C1: Eight.
J3: Eight?
C1: Yes.
J3: So how big is the room?
C1: ((Laughing)) very small.
((All students on the Chinese side laugh))
C2: She's joking, not very small.
C1: Do you have any questions?
J3: Do you like Japanese music?
C1: Yes, very much.
((Chinese students talking among themselves in Chinese, showing to camera two names of Japanese singers))
J3: Ahh, I know. ((Showing to camera the name of a Chinese singer)) Do you know her?
C ((Together)): Yes, yes.
C1: I like her very much, can you sing a song of hers?
J3: You want me to sing a song?
C1: Yes.
J3: No.
((Students on both sides clapping hands))
J3: (singing a Chinese song))

C1: It’s the song Honey Sadness.

J3: Yes, that’s right. I like this song very much.

C1: Me too.

C5: Thank you.

J3: Can you sing a song?

C3: I want to sing a song of Feiya Wang ((singing)), thank you.

C1: Have you heard of that before?

J1: No.

C1: It’s a typical song of Feiya Wang.

J3: Excuse me?

C1: Typical.

J3: Typical?

C1: It’s a typical song of Feiya Wang, very popular in China.

J3: Oh, yes.

C1: Ok, I think it’s time to go. Thank you very much, we had a good time together, see you next time. Good bye.

J3: Good bye.
**APPENDIX D**

**SURVEY ON COMMUNICATION STRATEGY USE**

This survey aims at finding out the similarities and differences between communication strategy use in text chat and videoconferencing. Please read the statements and check the most relevant response to each statement. Your name is NOT required.

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<tr>
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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Text chat allows me to use polite or impolite language to express feelings.</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>2.</td>
<td>Videoconferencing allows me to use polite or impolite language to express feelings.</td>
<td>☐</td>
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</tr>
<tr>
<td>3.</td>
<td>Text chat encourages the use of non-verbal expressions, like emoticons, capital letters, punctuations, and word substitutions (u—you, 2—to/too) to express my thoughts in English.</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>4.</td>
<td>Videoconferencing encourages the use of gestures and body movements to express my thoughts in English.</td>
<td>☐</td>
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</tr>
<tr>
<td>5.</td>
<td>Text chat allows me to correct my own mistakes and errors.</td>
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