A Study on Negotiation of Meaning in NNS-NNS Interactions
-Focusing on Synchronous CMC-

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1. Introduction

In second language acquisition research, investigations of interaction have primarily focused on native speakers/non-native speakers (NS/NNS) discourse as an important field of language learning (Long 1981,1983; Pica, 1994; Pica et al., 1986, 1987; Gass & Selinker, 2001). However, there are certain problems of NS-NNS interactions. NS-NNS discourse is usually characterized by an asymmetrical relationship between interlocutors (Wiberg, 2003). The reason is that the NS has more power than the NNS, both in turn taking and in dealing with the topic, because of the NNS's lesser ability for expressing their thoughts and ideas in the same way as a NS.

In this aspect, the kinds of discourse situations that a NNS-NNS pair is involved in have much more to investigate. Varonis & Gass (1985) argues that NNS-NNS interaction serves a crucial function for NNSs rather than NS-NNS discourse. They specifically suggest that NNS-NNS interaction provides learners with a non-threatening forum within which to practice developing language skills and also an opportunity to receive input that learners could have made comprehensible through negotiation. In addition, Park & Nakano (2001) argued the importance of NNSs interaction. They pointed out interactions between NNSs can enhance English proficiency as well by giving examples from an analysis of synchronous communication activities. In addition, Park & Nakano (2001) verified that through interaction among culturally different peer groups, learners showed cross-cultural similarities and differences of strategies and patterns in language acquisition.

Considering the importance of NNS-NNS interactions, there is the other significant aspect of second language learning, which is called Computer-Mediated Communication (CMC). Remarkably, CMC has rapidly been spread in all society, not least of all in education On-line and distance learning courses are now offered in various forms at many educational settings. CMC consists of two kinds: synchronous and asynchronous communications. Synchronous computer-mediated communication refers to a real time interaction, which is usually shown as written forms, between people over either a local- or distance area network. In synchronous CMC, messages are typed and sent, and received instantly. On-line chatting is one of general examples of synchronous

CMC. In contrast, in asynchronous communication, there is a significant time gap between the time the message is sent and when it is received by the speakers. Email and bulletin boards are the most common examples of asynchronous communication.

This study will focus on synchronous CMC in comparison with face-to face interaction. Both face-to-face interaction and synchronous CMC are the real time conversations, which the messages are instantly sent and received. However, recent research suggests that CMC could elicit more learner participation as well as better quality language than that found in face-to-face interaction (Beauvois, 1992; Kelm, 1992; Kern, 1995; Kim, 1998; Warschauer, 1996).

In addition, as compared to face-to-face discourse, in CMC, participants make more use of input, output and feedback. The major reason is that participants are allowed to have affordable time to process input, monitor and output because CMC is conducted with a written-based medium. In this respect, CMC could also help create a better environment for second language leaning (Chun, 1998).

The purpose of this paper is to verify that these interactions between NNSs in synchronous CMC could contribute to second language learning focusing on the negotiation of meaning. This study tried to set up two things: 1) one is to show what kind of specific characteristics and patterns NNS-NNS interactions possess in terms of " Pushdown" and "Pop", which are borrowed from Varonis & Gass, (1985b) in synchronous CMC in comparison of face-to-face interaction and 2) the other is to propose a model comprising the various strategies between NNSs through negotiation of meaning in synchronous CMC. For this study, the data is composed by chatting scripts from September 2002 to June 2003 (KWCCDLP Database:2002-2 & 2003-1 GE I &II).

2. Methodology
2.1 Method

The purpose of this paper is to confirm that interactions between NNSs in synchronous CMC could contribute to second language learning focusing on the negotiation of meaning. For this study, on-line synchronous chat conversations from twelve non-native and non-native speakers of English dyads that participated in the Korea-Waseda Cross-Cultural Distance Learning Project (KWCCDLP) are examined. Korea and Waseda University have the computer equipment which students can use to access to chatting, Cuseeme.

The period of observation was conducted scripts from September 2002 to June 2003 (KWWCCLDP 2002-2 & 2003-1 GE). The data for this study are composed by chatting scripts. Table 1 summarizes the method of this present study according to 4 categories: discourse, data, subjects and period.

Table 1. The Methodology

1	**Type of Discourse**	On-line chatting
2	**Data**	KWCCDLP Database:2002-2 & 2003-1 GE
3	**Subjects**	12 pairs (Korean-Japanese) of NNSs who participated in the Korea-Waseda Cross-Cultural Distance Learning Project (KWCCDLP)
4	**Period of Chatting**	Once a week for 6 weeks

2.2 Subjects

The subjects for this study were 24 students: 12 students at Korea University in Korea and the rest at Waseda University in Japan. The range of age was 19 to 27 with the majority falling into 19 to 21 represented two countries (Korea & Japan). In Korean side, all participants are native Korean speakers and in Waseda side, all are native Japanese speaker as well. They were majoring in the different department. Through the pretreatment background questionnaire, participants self-evaluated their English level as intermediate on the average.

All participants have not ever met before, so they did not have any shared background. For each chatting, any topic could be selected by participants without any constraints. Most participants tended to select a new topic whenever a new chatting started. They enjoyed chatting with adjacent Asian colleagues. Whenever they considered on-line chatting was not enough to talk, some of them tried to send e-mail or to use the text chat in their house after the chatting session in the Multimedia Education Room.

2.3 Procedure

Participants enrolled in the Global English Through Internet I or II class. This course introduces and applies Multimedia and Internet technologies into the classroom environment to develop mutual understanding and friendship among students and to motivate them to use and learn English as a communication tool.

During the class, students are able to be getting to know each other by exchanging ideas on different topics of interest by means of video conferencing. After class, each participant has to chat with the pre-matched counterpart partner, which they already met and had a chance to talk through video conferencing in class, for one hour once a week for 6 weeks.

The Global English Through Internet I or II class was held every Monday for 3 hours for 16 weeks in a Multimedia Education Room. Each participant was required to chat with each counterpart partner at least six times in one semester. In the Multimedia Education Room, there was more than one TA who helped the participants to plan the chatting timetable and trained the participants about the chatting system.

At first meeting, the students participated in an introductory training session where they received an introduction to CUseeme system and how to save their chatting records, which were to be used in this study. At the end of the semester, the participants had to submit their chatting data downloaded to diskettes to TA.

2.4 Data Analysis

This study will focus on the range from the pushdown to the pop for the negotiation of meaning in a NNS-NNS interaction in a synchronous CMC environment. Negotiation of meaning in interaction is considered as a main role in second language learning. In this study, for the range of negotiation of meaning, it is requisite to explain the important definitions of *'pushdown'* and *'pop'*, which Varonis & Gass (1985b) borrowed from the computer science literature. When the negotiation of meaning starts, the main flow of conversation would be broken in most conversations like going down.

In this sense, pushdown is an utterance, which begins the downward horizontal progression of the conversation. Hence, it can be the starting point of the negotiation of meaning in a discourse. Otherwise, pop is a move, which takes the vertical sequences back up to the main flow of conversation. Hence, this current study will focus on this range of the negotiation of meaning from the pushdown to pop to investigate the model comprising the various strategies through negotiation of meaning in synchronous CMC.

Accordingly, the chatting data will be analyzed based on the selected part of the negotiation of meaning from the whole chatting data. In detail, the functions of pushdown and pop to negotiate the factor of non-understanding will be emphasized first. And then, the frame ranged from the pushdown to the pop also will be divided into several sections according to each step that serves differently to negotiate the meaning.

3. Analysis of Data
3.1 The Frequency of Pushdown and Pop

The use of pushdown and pop in NNS-NNS interactions means the capability not only to indicate the fact that the interlocutor has a non-understanding point but also to control the entire flow of conversation by suggesting the proper topic. The interpretation of pushdown and pop were conducted in order to first determine the frequency of each comparing Korean with Japanese subjects. The frequency of pushdown and pop is analyzed under each pushdown and pop in accordance with Korean and Japanese subjects. The following table 2 shows the result of the frequency of both pushdown and pop.

Table 2. The Frequency of Negotiation of Meaning

	Korean subjects	Japanese subjects
Pushdown	42	20
Pop	34	17

Total	76	37

Interestingly, the result shows that the distinctive differences between Korean and Japanese subjects. Korean subjects showed 76 times total frequency of pushdown and pop. While Japanese subjects only showed 37 times. This shows big differences: Korean subjects dominate the use of pushdown and pop twice as often as Japanese subjects.

From this result, we infer that Korean subjects are much more active in controlling the conversational flow. With a high-ratio of using pushdown, Korean subjects signal to the counterpart speaker that something has gone wrong or that an utterance was in some way deviant or improper. In addition to this outcome, Korean subjects take the leading role in taking the separated conversation out of the horizontal flow of conversation tie up and moving back to the original place.

As a result, the interaction for negotiation of meaning among culturally different peer groups showed that there are comparative features in terms of using pushdown and pop. Namely, we can conclude that Korean subjects managed the conversation for negotiation of meaning by using pushdown and pop more frequently

3.2 The Direction from Pushdown to Pop

In this section, the direction from pushdown to pop will be examined. Table 3 shows the direction of negotiation of meaning. To be precise, in the case when a Korean subject takes both pushdown and pop, this situation indicates such as **K →K**. Example 1 shows this case: a Korean subject takes both pushdown and pop. In this way, **K→ J** means that a Korea subject starts a pushdown move to signal a non- understanding but a pop move is suggested by a Japanese subject. Seldom, there was a case of no pop. For instance, when participants had to stop chatting because of the time limitation, they did not need to suggest pop. In this case, no pop is represented as N.

Table 3. The Direction from Pushdown to Pop

Pushdown → Pop	K → K	K → J	K → N	J → J	J → K	J → N
Frequency	24	9	3	8	11	1
Percent	43 %	16 %	5 %	14 %	20 %	2 %

N : no pop.

Table 3 shows that the direction from pushdown to pop during negotiation of meaning. The majority of the use both pushdown and pop is made by Korean subjects resulting in 43 % of overall frequency.

Ex. 1] Example of K→ K

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Negotiation of Meaning	Direction
K: States mean US?	Pushdown
W: She is in NY.	
You know those language schools.	
K: yup	
W: ok~	
K: You think single is better than a couple?	Pop

Example 1 shows that Korean participants not only started pushdown by asking the meaning of 'US', but also after negotiation of meaning, mentioned a pop utterance in order to make their conversation move back to the main flow of conversation. This is represented by **K →K.** The results verify that Korean subjects have a strong tendency to start an utterance, which breaks the horizontal flow of conversation, that is, pushdown. After meaning negotiation, the Korean subjects take the conversation back to the main horizontal flow as well.

3.3 The Distribution of Pushdown and Pop

This part will contribute how the use of pushdown and pop causes the differences in a NNS-NNS interaction according to two phenomena: the dominance and the involvement in an interaction.

3.3.1 The Dominance in a Dialogue

Linell (1990) demonstrated three types of dominance in a discourse. Here show the definitions of three types of dominance as shown below.

(1) Quantitative dominance, which can be measured in terms of the quantity of speech: the interlocutor who dominates is the one who speaks most.
(2) Topic dominance, which can be measured in terms of the introduction of new topics: the interlocutor who dominates the topics tries to focus on the significant content and to make it socially shared in discourse.
(3) Interactional dominance, which can be measured in terms of initiatives and responses: the dominant interlocutor is the one who directs and controls the interlocutor's communicative actions more than her/his counterpart, and who at the same time is less controlled in her/his own turns. (p.238)

Additionally, Linell (1990) suggested that the conversation is usually characterized by the learner's language level. The more advanced the level, the more likely it is that the NNS will establish a better symmetry in the dialogue. With regard to three types of dominance, dominating the topic could be considered as an indicator of

the participant's language level in a NNS-NNS interaction. Considering the CCDL chatting data, the participant who controls both the pushdown and the pop moves for the negotiation of meaning dominate the conversation by selecting topics (Linell, 1990). The participant who does not deal with both pushdown and the pop is considered as the less proficient learner.

3.3.2 The Involvement in an Interaction

In unplanned dialogues, the conversation is likely to be constrained by the time limitation. This discourse context is also characterized by the rapid exchanges that do not permit long pause and planning. Based on this fact, it is true that the context in CMC is usually simple. On the other hand, according to Bialystock (1981), the effort required of the NNS in paying attention both to the information changes and to the necessary linguistic features involves a high level of selective control, while NS-NS dialogues are characterized by a high level of automatization and fluency.

From this perspective, even though the conversation in CMC has a tendency to make use of simpler forms than a face-to-face interaction, we can see the use of linguistic differences between participants rapidly communicating and exchanging the information in CMC. Schwarz (1998) claimed that English speakers make systematic use of the progressive to signal involvement and interaction or to signal detachment, formality and lack of interaction by not using the progressive. In this view, the frequency of the progressive aspects can be considered as one way of determining the relation between interlocutors' involvement and interaction

With the above background in consideration, the use of the progressive tense in CMC is examined in order to compare the comparison between 1) the participant who dominates both the pushdown and the pop move and 2) the other who is dominated in the same interactional modifying frame in a CMC environment. Table 4 shows the result of the use of the progressive tense as a measure of the participants' involvement in the discourse.

Table 4. The Use of The Progressive Tense

	Frequency of The Use of The Progressive Tense (%)			
	Past	**Present**	**Future**	**Total**
A	4 %	68 %	16 %	88 %
B	4 %	8 %	0 %	12 %
Total	8 %	76 %	16 %	100 %

A: the participants dominate the use of both the pushdown and the pop move
B: the participants who is dominated the use of both pushdown and the pop

There are a significant differences between group A and B. The group of participants who dominate the use of both pushdown and pop has a strong tendency to

use the progressive tense in their conversation. 88 % of the entire use of the progressive tense was made in group A. In detail, the use of the present progressive tense consists of 76 % of the total frequency. The use of the past progressive tense in both A and B groups comprises 8 % of the total frequency. The use of the future and the past progressive tenses is at 24 %, but group B did not make use of the future progressive tense. Here, the remarkable point is that instead of using *will*, participants are likely to use *be going to* for a future event. This shows that participants pay more attention to the very time they chat on line.

McCarthy & Carter (1995) insisted that some instances of variations between *be going to* and *will* are interactionally driven in that *be going to* express greater personal involvement on the part of the speaker, whereas *will* is a more neutral, detached and formal opinion. One example of them is the following Example. 2.

Ex. 2] *" BBC radio weather forecast"*

Temperatures will be below freezing, and it's going to be icy on the country roads, so do take care if you're driving. (McCarthy & Carter, 1995. p.24)

Here, McCarthy & Carter (1995) considered that their interactional explanation describes the form shifts occurring in such informal whether forecasts given on radio and TV, where *will* is used for neutral prediction whereas *be going to* signals the forecaster's more interpersonal evaluation. They also concluded that the real time conversation pushes interlocutor away from considerations of the semantics of time and more towards interactive interpretations of verb-form choices.

As a matter of result, Korean participants' use of *be going to* for the future event means interactionally greater personal involvement on the Korean subjects. In contrast, there was no use of *will*. In CCDL chatting, participants already recognized their conversation was to develop mutual understanding and friendship and to learn English as a communication tool. Therefore, it is possible that participants needed no use of a neutral, detached and formal opinion by using *will*.

This concludes that in NNS-NNS interaction, a participant who has an ability to control pushdown and pop for the negotiation of meaning is more involved in their conversation as shown by the frequent use of the present progressive tense.

3.4 Strategies in NNS-NNS Interactions in a CMC Environment

For negotiation of meaning in a face-to-face interaction (Varonis & Gass, 1985b) [1] strategies are different from in synchronous CMC. First, in synchronous CMC, there are 5steps including pop: pushdown, feedback, reaction and reinforcement and pop for negotiation of meaning. In comparison, in face-to-face interaction, they focused three steps: indicators, reaction and response to reaction. As a result, there is two more turn takings, which are reinforcement and pop

Second, instead of the verbal ways of communication, various paralinguistic features occurred including the use of punctuation, emoticons, onomatopoetic words, etc. Furthermore, these phenomena have been observed in most strategies in a CMC environment. These various paralinguistic features take a great role for leading a conversation smoothly.

There have been many studies focusing on the communicative strategy. This study will illustrate the most frequently used patterns, categories, definition, and examples for modification devices.

3.4.1 Pushdown

According to a model for negotiation of meaning in a NNS-NNS interaction (Varonis & Gass, 1985b), indicator was introduced as the signal utterance that has a non-understood feature. The hearer reacts to trigger and points out the speaker's utterance was in some way deviant or unacceptable. Therefore, from pushdown, the ongoing conversation is pushed down from the main flow of the conversation.

Indicator plays a very important since the utterance of indicator starts the negation of meaning. In a face-to-face interaction, a number of ways in which one number of the conversational pair signals to another that something has gone wrong were presented previously such *as echo, explicit state of non-understanding, no verbal response, inappropriate response* and so on. The most often used strategy was *echo with raising intonation* (Varonis & Gass, 1985b).

However, these strategies are only focused on face-to-face interactions. Even the same people in NNS-NNS interactions will behave differently in comparison with CMC. For the present study, the terms which were introduced in the model for negotiation of meaning in a NNS-NNS interactions (Varonis & Gass, 1985b) are compared and revised for the negotiation of meaning in a NNS-NNS interaction in synchronous CMC.

For instance, indicator, which was the first step in the resolution part, is changed to 'pushdown'. As has been mentioned before, pointing out an unacceptable utterance of non-understanding makes the ongoing conversation pushdown for the negotiation of meaning and it separates the conversation from the horizontal flow. In this regard, the term of pushdown is considered as more distinctive one than indicator. Therefore, the term of pushdown was replaced the indicator in this study. The Table 5 shows a list of the strategies and their frequency in the pushdown step.

Table5. The Strategies of Each Frequency of the Pushdown

	The Distribution of Pushdown	Frequency		
		K	J	Total
1)	**Clarification request**	8	1	9

2)	Confirmation check	(1) Understanding messages	4	2	6
		(2) Repetition word or phrase	11	6	17
3)	Comprehension check	(1) The speaker'sunderstanding	3	0	3
		(2)The counterpart 'sunderstan ding	4	4	8
4)	The use of 'What?'		4	3	7
5)	Punctuation		4	2	6
6)	Apology		0	2	2
7)	Etc.		4	0	4
	Total		42	20	62

For this study, based on the most frequently used patterns, categories, definitions, and examples of modification devices used in each move, each strategy is described as shown following.

Korean subjects dominated the use of pushdown as twice much as Japanese subjects. This means Korean subjects have a tendency not to hesitate to ask for non-understood messages than Japanese subjects. The considerably different distribution between Korean and Japanese subjects is the category of the clarification request. For Korean subjects, to express confusion or to ask for help due to unfamiliar word or incomprehensible messages are often used at the second highest rate. However, Japanese participants used the clarification request only once. Considering the cultural differences between Korean and Japanese subjects, Japanese subjects consider interrupting the conversation is not polite. Therefore, instead of the clarifying the incomprehensible message, Japanese subjects prefer confirm by repeating parts of the statement to ensure understanding.

3.4.2 Feedback

Varonis & Gass (1985b) indicated this step as the response. However, data shows that interlocutors used more various strategies that just responding. Because of this reason, this step is designated feedback, which is considered as more cooperative notion. After the pushdown step, the counterpart participant answered in various ways as feedback. Table 6 represents the result of the strategies used as the feedback move and explanations for feedback strategies observed with the most frequently used examples.

Table 6. The Strategies and Each Frequency of the Feedback

The Distribution of Feedback	Frequency

		K	J	Total
1)	**Explicit answer with the declarative sentence**	11	16	27
2)	**Acknowledgement**	4	1	5
3)	**Onomatopoeic word**	2	1	3
4)	**Emoticon**	2	0	2
5)	**Punctuation**	1	0	1
6)	**Ignorance**	1	0	1
7)	**Giving an example**	4	5	9
8)	**Re-questioning**	9	4	13
9)	**Others**	2	0	2
	Total	36	27	63

For the feedback move, several more strategies were employed than the pushdown move. Korean subjects used many different types of feedback but Japanese subjects were inclined to use just a few strategies such as explicit answer with the declarative sentence, giving an example or re-questioning in the highest frequency. On the Japanese part, paralinguistic features in the categories of (3) Onomatopoeic word, (4) Emoticon and (5) Punctuation are saliently low in frequency occurring only once. As compared to the Korean side, these categories were used five times. Giving examples was the most frequently used by both two groups. The strategy at the second highest rate in Korean subjects was (8) Re-questioning. Korean students used this category by using question forms instead of giving feedback. This is different from the repetition of the previous utterance or its part.

3.4.3 Reaction

A reaction move is considered on the part of the speaker who starts the pushdown move. According to Varonis & Gass (1985b), they regarded this move as an optional unit of the routine because it often does not appear. However, in CCDL chatting data, this reaction step has been observed as the obligatory turn to make the ongoing conversation smooth and to make sure about the feedback utterance.

Through the use of this move, we could conclude that participants in synchronous CMC are in some way trying to lead their conversation more actively by using more frequent turn-takings with each other than a face-to-face interaction (Kern, 1995). For this reaction step, there found much more paralinguistic features than the previous steps. The Table 7 below shows what kinds of strategies including more frequent paralinguistic ones are used for a reaction move.

Table 7. The Strategies and Each Frequency of the Reaction

The Distribution of Reaction	Frequency

		K	J	Total
1)	Onomatopoeic word	6	4	10
2)	Emoticon	2	2	4
3)	Punctuation	1	2	3
4)	Acknowledgement	8	3	11
5)	Summary	9	5	14
6)	Agreement	5	1	6
7)	Repetition	7	2	9
8)	Others	7	3	10
	Total	45	22	67

For the reaction move, 5) Summary strategy was the most frequently used. For the next, paralinguistic feature strategies such as onomatopoeic word and emoticon are found with a high ratio than the others. The explanations of each strategy that has not been mentioned before are presented with the most appropriately used examples. Here, both Korean and Japanese subjects used every single strategy within the same proportion even though the entire frequency of Korean is much higher than Japanese. In the other strategies, questioning the counterpart's understanding, thanking for the feedback and so forth are used as reaction.

3.4.4 Reinforcement

There is a certain move, which comes after reaction and before pop to go back to the main flow of conversation, designated by reinforcement. This reinforcement move was not mentioned in the model for the negotiation of the meaning in a face-to-face NNS-NNS interaction (Varonis & Gass, 1985b). However, in the CCDL chatting data, a new additional move has been found before the pop move. This reinforcement move has three remarkable characteristics.

First, the reinforcement move is not related with the speaker on the part of the reaction. That is, regardless who the previous speaker was, any participant who would like to tie up the negotiated interaction tends to use the reinforcement move. This step represents the function to sum up the negotiated meaning.

Secondly, the majority of the reinforcement is made in the categories of paralinguistic strategies. In addition, participants use various kinds of paralinguistic features. The crucial point is that these paralinguistic factors take significant roles in ongoing conversation. Especially, the uses of emoticons, onomatopoeic words, and punctuations function to convey the participants' attitude in written forms.

Lastly, the reinforcement does not work to transmit information, but to cohere the negotiated interaction frame. As mentioned earlier regarding the characteristics of CMC, the reinforcement is shown as very simple form representing CMC feature..

Table 8. The Strategies and Each Frequency of the Reinforcement

	The Distribution of Reinforcement	Frequency		
		K	J	Total
1)	**Onomatopoeic word**	4	2	6
2)	**Emoticon**	8	1	9
3)	**Punctuation**	3	3	6
4)	**Acknowledgement**	2	1	3
5)	**Surprising reaction**	3	3	6
6)	**The Counterpart's comprehension check**	1	1	2
7)	**Thanking**	1	0	1
8)	**Agreement**	15	9	24
10)	**Others**	2	0	2
	Total	39	20	59

For reinforcement, both Korean and Japanese students most frequently used 8) agreement strategy. Through agreeing with the previous speaker's comment, agreement strategy makes doubly sure. For the others, paralinguistic strategies were largely employed. The uses of emoticons, onomatopoeic words, and punctuation function notably to convey the participants' attitude in written forms because there was result the lack of visual and aural aspects.

Subjects made conscious efforts to compensate for the lack of visual and aural aspects, which are accessible in face-to-face interaction, by employing alternative strategies such as emoticons, onomatopoeic words, and punctuation. Participants' adaptation of paralinguistic strategies in synchronous CMC demonstrates that learners are aware of the need of change. For that, learners are prompted to increase metacommunicative skills.

To sum up, participants in the CCDL chatting used a variety of interactional strategies, in particular, paralinguistic features, but they are different from those found in face-to-face interactions. This significantly means that a synchronous CMC environment encourages unique paralinguistic strategies, which could help learners to develop metacommunicative skills.

3.4.5 Pop

A pop move takes the vertical sequences back up to the main flow of conversation. This pop move helps the conversation to return the original flow. Thus, it would be important to look over how pop is suggested.

Table 9. The Type of Sentence for Pop

		Korean	Japanese	Total
1)	Declarative	15	6	21
2)	Interrogative	*15*	*6*	*20*
3)	Imperative	4	5	9
	Total	34	17	51

The above Table 9 shows that what kinds of sentence type for pop were used in the CCDL chatting data. Even though Korean students used a pop move as twice much as Japanese subjects, with the same rate both Korean and Japanese subjects suggested pop by using declarative and interrogative sentences. In contrast, imperative sentences were used in low frequency. The following example shows these pop move usages.

Ex. 3]   Well   How about ~?
            Anyway,   Why don't we ~?
            By the way,   Have you ever ~?
            Please   I have a topic to chat
            Then,   I passed the first competition today

Interestingly, 65% of whole sentences for a pop move was made with certain discourse markers. Both Korean and Japanese subjects have strong tendencies to suggest topics with discourse makers such as *Anyway, By the way, Please or So and etc.*

3.5 The Model for Negotiation of Meaning in a NNS-NNS Interaction in Synchronous CMC
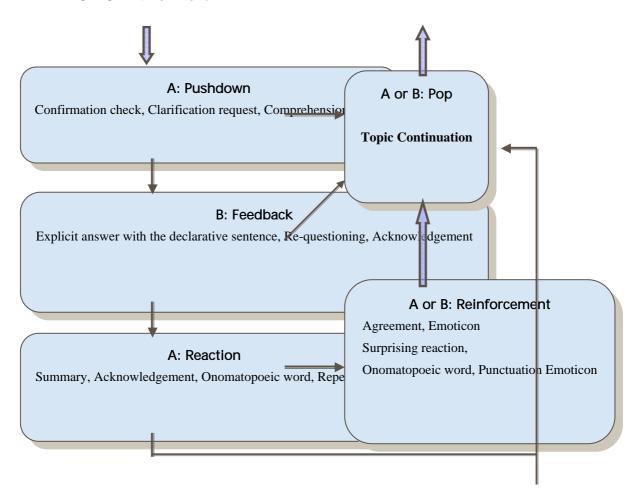
This is a proposed model with the various strategies that Korean- Japanese subjects most frequently used during their chat. This study began by analyzing the communication strategies from the chatting data between Korean and Japanese subjects, and adjusted the model scheme (Varonis & Gass, 1985b).

This proposed model is to be read as a flowchart presenting a series of either or options that constitute the following sequence. In order to develop the strategies and patterns of negotiation of meaning in NNS-NNS dialogue, in each step the following strategies are mentioned in accordance with the most frequently used from left to right.

Figure 1 shows a proposed model for the negotiation of meaning in NNS-NNS interaction in synchronous CMC.

Figure 1. The Proposed Model for Negotiation of Meaning in a NNS-NNS Interaction in a

CMC Environment

A: Pushdown

Confirmation check, Clarification request, Comprehension

A or B: Pop

Topic Continuation

B: Feedback

Explicit answer with the declarative sentence, Re-questioning, Acknowledgement

A or B: Reinforcement

Agreement, Emoticon

Surprising reaction,

Onomatopoeic word, Punctuation Emoticon

A: Reaction

Summary, Acknowledgement, Onomatopoeic word, Repe

For these outcomes, the terms that are introduced in Varonis & Gass (1985b) were replaced, an indicator changed to a pushdown, which could be considered as the same notion as confirmed before. Instead of a response, a feedback has been selected because the chatting data that Korean- Japanese subjects used has been observed using more various strategies than just responding. In this sense, the feedback could be considered as a more cooperative notion. A reaction to the response was replaced by just a reaction. In addition, there is one additional move, which is designated as a reinforcement move. This reinforcement is a new step, which Varonis and Gass (1985b) did not include in their model. The reinforcement step was used in order to make clear whether the counterpart speaker had understood well or not. Interestingly, Korean-Japanese subjects strongly use reinforcement strategies before going back up to the main flow of conversation.

There is also an example of the proposed model in this study as following in Example 4.

Ex. 4] Negotiation of Meaning in a NNS- NNS Interaction in Synchronous CMC

Discourse for the Negotiation of Meaning	4 Steps with Each Strategy
A: Please enter this program B: What program? What do you mean by that? A: Program means,,,,,,, if you can be a producer, I want to do it together. B: I see. ^^ A: Yeah~ hahahaha ^_____^	(Pushdown-Clarification) (Feedback- Explicit answer) (Reaction-Acknowledgement) (Reinforcement-Onomatopoeic word + Emoticon)

This is one episode of the negotiation of meaning in a NNS- NNS interaction in a CMC environment. First, subject A says, *"Please enter this program."* This is the trigger, which is not included in the range of the negotiation of meaning in this study. After that, subject B asked, *"What program? What do you mean by that?"* This clarification request strategy causes a pushdown move as the first step of negotiation of meaning. For that, subject A answered, *"Program means,,,,,,, if you can be a producer, I want to do it together."* This is a feedback move with an explicit answer of non-understanding. Consecutively, for as a reaction move, subject A said, *"I see ^^"* by using an acknowledgement strategies. Lastly, as the new outcome, subject A tied up the negotiated interaction by saying *" Yeah~ hahahaha ^_____^."* with an onomatopoeic word and emoticon. This reinforcement prime is made several strategies such as onomatopoeia, keyboard symbols and emoticon.

This is my proposed model in NNS-NNS interaction in synchronous CMC shows how Korean and Japanese subjects negotiate meaning with the various strategies.

4. Conclusion

Strategies for negotiation of meaning in NNS-NNS interaction in synchronous CMC are analyzed and defined with each example based on KWCCDLP chatting data. There found 5steps: pushdown, feedback, reaction and reinforcement and pop. This result is different from face-to-face interaction study, which discussed three steps: indicators, reaction and response to reaction (Varonis & Gass, 1985b). Especially, in synchronous CMC, various paralinguistic features occurred such as punctuation, emoticons, onomatopoetic words, etc and remarkably the use of these metacommunicative strategies take a great role for leading a conversation smoothly. Finally, this study suggests that a modal for negotiation of meaning inns-NNS interaction in synchronous CMC with these various strategies.
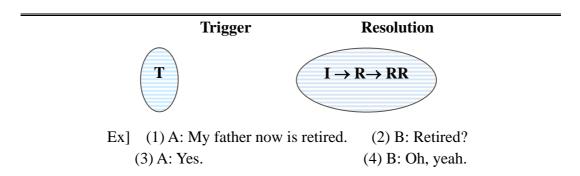
Acquisition in a language occurs through consistent interaction. According to Long (1983, 1985)'s studies, interaction focusing on meaning negotiation through conversations was emphasized. This interactional exchange requires continuous feedback from each conversation participant. However, these studies on second language acquisition have been based on interaction between NSs and NNSs. On the other hand, these settings between NSs and NNSs have several difficulties for second language learners. Therefore, the present study can provide a new perspective on second language acquisition by examining interaction between NNSs, and also demonstrate that a synchronous CMC environment could take a role in developing matacommunicative skills in a conversation between NNSs.

The purpose of this paper was twofold: first, to show what kind of characteristics NNS-NNS interactions have: second, to develop a model comprising the various strategies through negotiation of meaning in synchronous CMC. This suggested model with the communication strategies in Figure   reflects how NNSs interact in an effort to understand meaning and avoid potential problems in communication during their chatting. In NNS-NNS interactions, learners make input comprehensible by signaling that it has not been understood or interrupting the main flow of discourse. This negotiation of meaning in NNS's interactions is a very important part of conversation because it shows that learners could offer the numerous interruptions to receive comprehensible input and to produce appropriate output, which could facilitate second language learning.

As a result, the CCDL data verify that NNS-NNS interaction in synchronous CMC could facilitate second language learning through meaning negotiation, which plays a main role by using various types of strategies. The participants' adoption of paralinguistic features seems to help synchronous CMC to be fluent and smooth. These strategies will enable English learners to become actively involved and play a vital role in leading a peer group conversation among NNSs in synchronous CMC.

Notes

[1] Varonis & Gass (1985b) suggested a model for the negotiation of meaning in a face-to-face NNS-NNS interaction when there is a lack of comprehension between speakers in the real conversation. This model is illustrated as following.

Trigger	Resolution
T	$I \rightarrow R \rightarrow RR$

Ex] (1) A: My father now is retired. (2) B: Retired?
    (3) A: Yes.   (4) B: Oh, yeah.

1) *Trigger means an utterance on the part of the speaker, which results in some indications of non-understanding on the part of the hearer.*
(2) Indicator is an utterance on the part of the hearer that essentially halts the horizontal progression of the conversation and begins the downward progression.
(3) Response can be additional information implicitly or explicitly stated in the form of an indicator.
(4) Reaction to Response is an optional unit of the routine.

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