

Keywords: Input Hypothesis, Output Hypothesis, Questioning, Chinese as a Second Language

1. Motivation

As Nunan indicates (1991), teacher talk is of crucial importance of classroom organization and management, since it is the language that teachers use to interact with students in class. Long (1985) further suggests several ways that input can be made comprehensible. One way is through the modification of the interactional structure of conversation. In doing so, an interdependent relationship should exist between the competent speaker (i.e., native speaker, NS) and the less competent speaker (i.e., nonnative speaker, NNS). In order to complete the task, each participant needs to convey and obtain unknown information from the other person. According to Long, the opportunity to provide feedback allows the NNS to negotiate to conversation, and it also forces the NS to adjust his or her utterances via modification, for example, using structures and lexis that NNS already knows. Input, therefore, is made comprehensible through this negotiation of meaning process. (Hsu, 2001, p.22). Questions are often then asked during the negotiation. According to Long, questions are the dominant form used by NSs when addressing NNSs in informal settings. NS's frequent use of questions can be attributed to a number of functions that questions serve to facilitate and sustain participation by the NNS. Certain kinds of questions, for example, Yes/No and "or-choice" questions, are found to be particularly easy for the NNS (Brock et al., 1986). In other words, the NS's questions function as scaffolds that make it possible for the NNS to participate in verbal interaction that is beyond his/her current second language repertoire.

However, no empirical evidence has indicated that the quantity of teacher and student questions is in any way related to effective teaching and learning in a CSL setting. To better understand how questioning influence L2 learning, it is necessary to examine the role that questions play in classroom discourse. Hence, the following research questions will be addressed in the present study:

- 1) How do teachers' questioning practices influence learners' output production in class?
- 2) What roles do students' questions play in the elicitation of student learning input from the teacher?
- 3) How might factors such as attitudes toward speaking in class and learners' perceptions of class climate contribute to differences in students' questioning practices?

2. Literature Review

This section reviews some important issues in input enhancement and questioning in class.

White et al. (1991) investigated the extent to which form-focused instruction (i.e., input enhancement) contributed to ESL learners' accuracy in question formation within a communicative program. Three classes of ESL learners aged 10~12 were asked to participate in input enhancement activities on question formation. The results showed that input enhancement yielded genuine changes in learners' interlanguage systems since learners who were exposed to the input enhancement activities significantly. Similarly, Izumi (2002) examined the facilitative effects of output and visual input enhancement on the acquisition of English relative clauses by adult second language learners of English by arguing for the need to consider levels and types of processing to account for how sensory detection can lead to learning. A computer-assisted reconstruction and reading task was used to present the target input. It was found that those engaged in output-input activities outperformed those exposed to the same input for the sole purpose of comprehension. Moreover, those who received visual input enhancement failed to show gains in learning. Finally, no support was found for the hypothesis that the effect of input enhancement was comparable to that of output.

As for the studies of the Output Hypothesis, a major addition to Krashen's (1985) and Long's (1985) theoretical framework is the Output Hypothesis proposed by Swain (1985). Based on her research on French immersion education in Canada, Swain points out that students who enter an immersion program do not acquire native-like proficiency in their speaking and writing skills, even though

they have been exposed to a rich source of comprehensible input for years. In light of this finding, she argued that comprehensible input is necessary yet insufficient for SLA. What learners also need is the opportunities for learners to produce the target language.

The Output Hypothesis states that L2 learners may “notice” a linguistic problem, which can be triggered by learners’ attempt to produce the target language “but do not know how to say (or write) precisely the meaning they wish to convey (Swain, 1998, p.67). This noticing can “push” learners to modify their output to make it comprehensible to others by searching their own linguistic resources for information or paying attention to relevant input. The process that learners engage in as they move from encountering a linguistic problem in producing the target language, to developing a solution by modifying their output, is part of the process of SL Learning. Similar to the Interaction Hypothesis, the premise for this process to be activated is the communicative need engendered by a task that requires learners to produce their L2.

Compared with Long’s Interaction Hypothesis, Swain’s Output Hypothesis requires L2 learners to play a much more active role and take more responsibility for their learning. With an emphasis on language production in the Output Hypothesis model, learners need considerable opportunities to speak and write in the L2 classroom. However, as we know, it is often the teacher in class, not the student, who dominates the class talk. As a result, L2 learners are less likely to be “pushed” to operate at the stage that is slightly beyond their current interlanguage stage. Moreover, since the teacher already has the answer in mind, there is little need for students to make an effort to modify their output to make it comprehensible to the teacher (Hsu, 2001, p. 25).

In their work on ESL teachers’ questioning behavior, Long and Sato (1983) investigated the forms and functions of questions in ESL teacher speech, and compared the findings with those of NSs in informal conversation with NNS. They found that in the beginning-level ESL classes, the teachers asked significantly more display (51%) than referential questions (14%). Pica and Long (1986) found that both experienced and inexperienced teachers used far more display questions as well. Similarly, Musumeci (1996) found that teachers dominated

classroom talk and they initiated most of their verbal exchanges with students by asking display questions. The results of Brock et al. (1986) showed that students' responses elicited by referential questions contained significantly more features characteristic of genuine communication in naturalistic settings than those elicited by display questions. However, other factors like students' attitudes and teacher's questioning strategies might play more important roles than questioning types in eliciting student responses.

Good, Slavings, Harel, and Emerson (1987) found that questions that request meaningful explanations were relatively rare at all grade level, while procedural questions were frequently asked by students at all grade levels. Good et al. (1987) found that older students and higher achievers asked questions to seek meaningful information more frequently than did younger students or lower achievers, whereas younger students or lower achievers were more likely to ask questions concerning classroom procedure than did older students and higher achievers. Hsu (2001) found that student questions elicited specific input that enhanced their knowledge of English and exerted certain influence and control over input comprehensibility and classroom discourse. Also, via questioning, students raised each other's awareness about target language use.

3. Research Design

3.1 Participants

Six classes of foreign students of the Mandarin Training Center of National Taiwan Normal University were invited to participate in the present research together with their teachers. The number of the students was 32 in total, as can be seen in Table 1:

Table 1: Overall Information of the Foreign Students

Stage Level	Pre- Instructional	Post- Instructional	Invalid subjects	Valid subjects at both stages
Beginning	18	13	1	12
Intermediate	17	10	0	9
Advanced	15	13	1	11
Total	50	36	2	32

The six participating teachers were given pseudonyms as Teachers A1 and A2 for the teacher of the advanced class, Teachers B1 and B2 for the teacher of the intermediate class, and Teachers C1 and C2 for the teacher of the beginning class. They were all experienced female native speakers of Mandarin Chinese with an average teaching year of 13.7 at the time of the study.

The six classes all met five times a week from Monday to Friday, two successive 5-minute class periods a day. They were structured differently in terms of class scheduling but were largely quite similar in the way that the instructional activities were organized in class.

3.2 Instruments

The six teachers and the 32 students participated in this study throughout Fall, 2005 and Spring, 2006. No specification was made regarding the teachers' method of instruction and the structure of classroom activities. They were simply asked to deliver their instruction in their usual way and during their ordinary schedule, thereby providing an instructional mode and producing as naturally occurring language as possible.

A questionnaire about class climate (see Appendix A) was designed in the beginning of the study. Ten questions were asked in the questionnaire and further classified into five categories, teacher support, teacher attitude, peer support, peer attitude and student feelings. The questionnaire was given to the participating students in the second week and distributed to them again at the end of the semester to comment on their perception of the climate change.

Each class was observed seven times during the entire study. Class observations took place in the second week of the term followed by a successive 5-day visit in the middle of the term and a final visit in the final week. The researcher's assistants were asked to video tape the classes after the researcher communicated with the participating teachers and students.

An interview was conducted outside the classroom after the last visit (see Appendix B). To get a general picture of questioning in class, the six participating teachers and two students of each class were interviewed. The teachers were asked to share with the researcher their purpose of using questions and the types of questions used more frequently in class. The students were asked to comment on their attitudes toward speaking in class (cf. Young, 1988) and their perception of the classroom climate (cf. Fassinger, 1995).

After the class observations, the data collected were tagged according to the following coding scheme:

Table 2: Syntactic and Pragmatic Classifications of Question Types

Syntactic Classification		
Question Type		Example
A1	disjoined question	Ni yao he kafei haishi cha? <i>'Do you want to drink coffee or tea?'</i>
A2	tag question	Ta yijing laile, shi ma? <i>'He has been here, hasn't he?'</i>
A3	A-not-A question	Ta shi bu shi xuesheng? <i>'Is he a student or is he not a student?'</i>
A4	particle question	Ni hui qu ma? <i>'Will you go?'</i>
A5	wh-question	Shei xiangyao qu Taipei? <i>'Who wants to go to Taipei?'</i>
A6	English question	What's your name?

Pragmatic Classification		
Question Type		Example
B1	display question	Zhe shi bi ma? 'Is this a pen?'
B2	referential question	Nimen hui qu canjia wohui ma? 'Will you go to the dancing party?'

All the classroom observations were videotaped and later transcribed by the researcher's assistants. Questions used by both the teachers and the students were identified and keyed in into a computer. The frequency of the questions were counted and later processed by SPSS.

4. Results and Discussion

4.1 Teacher Questioning

Table 3 shows that of the six syntactic question types the participating teachers used A4 questions (33.41%) significantly more frequently ($p=.000$, $p<.05$), followed by A5 questions (25.49%), and B2 questions (56.34%) slightly more than B1 questions (43.66%):

Table 3: Question Types Used by the Participating Teachers

Syntactic Classification								
A1	A2	A3	A4	A5	A6	Sum	χ^2 value	p -value
105 (1.43%)	1686 (22.98%)	874 (11.91%)	2451 (33.41%)	1870 (25.49%)	351 (4.78%)	7337 (100%)	3494.402	.000*
Pragmatic Classification								
B1		B2		Sum		χ^2 value		p -value
3203 (43.66%)		4134 (56.34%)		7337 (100.00%)		118.136		.000*

Relatively speaking, A1 questions (1.43%) and A6 questions (4.78%) were rarely used by the teachers because (a) the disjoined questions were seldom used in daily conversation, and (b) the teachers shifted to English questions when communication broke down.

Our findings were quite similar to the results of Tsai (2005) in that both A5

(wh-questions) and A4 (particle questions) were more frequently used by foreign students than A3 (A-not-A questions). In his study, ten foreign students of Chinese were investigated and it was found that foreign students' use of question types were similar to native controls'. However, the participants in the present study still showed a lower percentage of A5 questions than A4 questions. This difference was expected since that Tai's research was an experimental study, but our findings were obtained from natural classroom observations. To give comprehensible input, the participating teachers tended to use particle questions to enhance their interactional modes at initial stage. That's why questions in English (i.e., A6 questions) were occasionally used in class to facilitate communication. The results of the chi-square test showed that the teachers used referential questions significantly more frequently ($p=.000$, $p<.05$) than display questions.

As reported by one of the intermediate teachers, the teacher indeed used more Yes/No questions in class:

Excerpt 1¹:

In the beginning of the class, I always review what I taught first, so **I would use more Yes/No questions**. When I get to the text, I would use more referential questions to elicit more information from my students. Sometimes, I also use rhetorical questions for emphasis. But **I usually use wh-questions** because I think that my students need more practice (taken from Teacher I1).

To sum up, the interview data matched the findings obtained from the classroom observations. Our teachers indeed liked to use wh-questions (also referential questions) to help the learners to express themselves.

4.2 Student Questioning

Table 4 presents the questions used by the students in class:

¹ The interview was conducted in Chinese, later transcribed, and translated into English by the researcher.

Table 4: Question Types Used by the Participating Students

Syntactic Classification								
A1	A2	A3	A4	A5	A6	Sum	χ^2 value	p -value
10 (1.65%)	13 (2.15%)	35 (5.79%)	290 (47.93%)	178 (29.42%)	79 (13.06%)	605 (100%)	619.982	.000*
Pragmatic Classification								
B1		B2		Sum		χ^2 value		p -value
6 (.99%)		599 (99.01%)		605 (100.00%)		581.238		.000*

As can be seen above, our students used A4 questions (47.93%) significantly more frequently than A5 questions (29.42%) and A6 questions (13.06%) and A3 (5.79%). The questions they asked least frequently were A1 (1.65%) and A2 (2.15%) questions. With regard to the pragmatic classification of the question types, it was found that our students used B2 questions significantly more frequently than B1 questions, indicating that referential questions were the perfect type of question for them to consider. The six display questions were found in the case of group work where the participating students were acting more like teachers during their discussion.

As reported by the students in the interview, the questions they usually asked their teachers were usually concerned with the meaning or usage of a Chinese word or a grammatical point:

Excerpt 2:

For example, my teacher was teaching us “*zuo de kui*” and “*zuo de lai*,” I asked my teacher if there was any difference between the two phrases and how to use them (taken from B2-6).

Excerpt 3:

I usually ask questions about *grammatical structures* like why certain words should be here and there (A1-4).

For survival reasons, communication skills are required. Therefore, our students tended to ask questions related to their daily life and communication needs. That is the reason why referential questions were often used.

To sum up, the teachers' questioning was influential in that it also helped to elicit the students' production of particle questions and wh-questions. Both groups of subjects seldom used disjoined questions because of their infrequency in input. It was also found that A6 questions (questions in English) were occasionally used by both the teachers and the students in order to facilitate communication. However, relatively speaking, the students used A6 questions more than A1 or A2 questions because of their proficiency. As discussed above, in addition to the pragmatic types of questions, it was found that the production of syntactic question types by both groups patterned quite alike (T: A4 > A5 > A2 > A3 > A6 > A1; S: A4 > A5 > A6 > A3 > A2 > A1).

4.3 Factors Affecting Questioning

Table 5 presents an increase of student questioning with regard to the students' use of A5 and A6 questions (A5: $\chi^2 = 7.23$, $p < .01$; A6: $\chi^2 = 10.80$, $p < .01$):

Table 5: Syntactic Question Types Used in Student Questioning at the Pre- and Post-Instructional Stages

Question Type	Pre-instructional	Post-instructional	Sum	χ^2 value	p -value
A1	4 (100%)	0 (0%)	4 (100%)	-	-
A2	2 (25 %)	6 (75%)	8 (100%)	2.00	.157
A3	4 (57.14%)	3 (42.86%)	7 (100%)	.14	.705
A4	57 (50%)	57 (50%)	114 (100%)	-	-
A5	20 (32.79%)	41 (67.21%)	61 (100%)	7.23	.007**
A6	13 (26.53%)	36 (73.47%)	49 (100%)	10.80	.001**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6: Pragmatic Question Types Used in Student Questioning at the Pre- and Post-Instructional Stages

Question Type	Pre-instructional	Post-instructional	Sum	χ^2 value	<i>p</i> -value
B1	6 (100%)	0 (0%)	1 (100%)	-	-
B2	98 (41.00%)	141 (59.00%)	239 (100%)	7.74	.005**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

As mentioned earlier in the previous section, a questionnaire was designed to examine the relationship between questioning and factors affecting it. The students' reply to the two questions (Q3: In this class our teachers are pretty supportive of our questions./ Q9: My teacher will help me when I can't answer her questions.) about teacher support for questioning were positive. There was no significant difference in teacher support between the pre- and post-instructional stages:

Table 7: A Comparison of Teacher Support at the Pre- and Post-Instructional Stages

Comparison	Mean	N	Std. Deviation	<i>t</i> -value	<i>p</i> -value
pre_TS1	3.72	32	0.63	1.41	.169
post_TS1	3.56	32	0.62		
pre_TS2	3.66	32	0.65	.62	.540
post_TS2	3.56	32	0.72		
pre_TS	3.69	32	0.59	1.05	.301
post_TS	3.56	32	0.61		

Note. Range: 1~4, * $p < .05$, ** $p < .01$, *** $p < .001$

The students' responses to teacher attitude during the process of questioning showed no significant difference, either. It was found that the two questions (Q4: My teacher only asks some classmates questions in class./ Q8: My teacher will not stop me while I am answering her questions.) Overall, the teachers' atti-

tudes were considered not as supportive as they used to be (TA: 3.44→3.13, $p = .027$). Some of the students even found that their teachers tended to ask certain classmates questions (TA1: 3.59→3.41) and sometimes the teachers would interrupt them (TA2: 3.28→2.84):

Table 8: A Comparison of Teacher Attitude at the Pre- and Post-Instructional Stages

Comparison	Mean	N	Std. Deviation	<i>t</i> -value	<i>p</i> -value
pre_TA1	3.59	32	0.71	1.03	.311
post_TA1	3.41	32	0.84		
pre_TA2	3.28	32	0.81	1.84	.075
post_TA2	2.84	32	1.17		
pre_TA	3.44	32	0.66	2.33	.027*
post_TA	3.13	32	0.65		

Note. Range: 1-4, * $p < .05$, ** $p < .01$

As B1-6 said, ‘I think my teacher ...she **guided us to ask** and **listen to us** and **gave us time** so we wouldn’t feel that stressed.’ The teacher knew how to lower students’ anxiety filter and encourage them to ask questions, which did benefit them a lot.

With regard to peer support, no significant difference was found at the pre- and post-instructional stages. That is to say, most students found that they classmates supportive in class (i.e., Q6) and that they would like to work with their teammates:

Table 9: A Comparison of Peer Support at the Pre- and Post-Instructional Stages

Comparison	Mean	N	Std. Deviation	<i>t</i> -value	<i>p</i> -value
pre_PS1	3.38	32	0.71	1.16	.255
post_PS1	3.25	32	0.57		
pre_PS2	3.25	32	0.72	1.07	.292
post_PS2	3.13	32	0.66		
pre_PS	3.31	32	0.67	1.22	.234
post_PS	3.19	32	0.55		

Note. Range: 1~4, * $p < .05$, ** $p < .01$, *** $p < .001$

The results also showed that peer attitudes were good during the process of questioning. They found that their classmates respect their opinions (i.e., Q2) and that their classmates would listen to what they said (i.e., Q5):

Table 10: A Comparison of Peer Attitudes at the Pre- and Post-Instructional Stages

Comparison	Mean	N	Std. Deviation	<i>t</i> -value	<i>p</i> -value
pre_PA1	3.72	32	0.52	3.09	.004**
post_PA1	3.28	32	0.77		
pre_PA2	3.28	32	0.85	1.22	.231
post_PA2	3.00	32	0.84		
pre_PA	3.50	32	0.58	2.17	.037*
post_PA	3.14	32	0.71		

Note. Range: 1-4, * $p < .05$, ** $p < .01$

Generally speaking, peer attitudes were considered positive, but there was a slight decrease (PA: 3.50→3.14, $p = .037$) at the post-instructional stage. They found that their classmates might not respect them or that they might not pay full attention to what they said. This may be due to the fact that the students got to know more about each other, so they were not as serious as they were at the beginning.

The other two questions examined the students' feelings about questioning in class were Question 7 (In this class, I feel that I am under pressure if I don't talk.) and Question 10 (In this class, I am happy with learning). As shown in Table 11, our students' pressure seemed to be successfully reduced (SF: 3.20→3.22):

Table 11: A Comparison of Student Feelings at the Pre- and Post-Instructional Stages

Comparison	Mean	N	Std. Deviation	<i>t</i> -value	<i>p</i> -value
pre_SF1	2.88	32	0.87	-.22	.831
post_SF1	2.91	32	0.96		
pre_SF2	3.53	32	0.67	.00	1.000
post_SF2	3.53	32	0.62		
pre_SF	3.20	32	0.54	-.19	.851
post_SF	3.22	32	0.58		

Note. Range: 1-4, * $p < .05$, ** $p < .01$

To sum up, the most significant factors that affected student questioning were the teachers' attitudes and the students' attitudes.

5. Conclusion

The present study has compared the teacher questioning with the student questioning and found that the question types they used were pretty similar, suggesting that input enhancement is influential. Syntactically speaking, particle questions and wh-questions were generally favored and used more frequently than other question types. As for the pragmatic classification of questions, referential questions were more frequently used by both the teachers and students in questioning. In addition, the attitudes of the participating teachers and students were found to be a crucial factor in determining students' questioning in class. The following issues are still worth looking into:

First, only six classes were observed in the present study. More subjects should be recruited for a longitudinal study in the future and see if there is any relationship between instructional differences or modified input and learning outcomes (Chaudron, 1983; Ioup and Krashen, 1984; Kelch, 1985; Spada, 1986).

Second, we did not examine the question types and questioning patterns of learners of different proficiency in the present study. Future researchers can also probe into this issue by examining how learners talk to each other and see how input and interaction take place in task-centered discussions (Porter, 1986).

Third, we only compared the total number of questions used by the teachers and the students². Future research may investigate the relationship between the amount of questions teachers use in class and the stage they use them.

References

- Brock, C., Crookes, G., Day, R., & Long, M. (1986) The differential effects of corrective feedback in native speaker non-native speaker conversation. In Day, R. (Ed.), *Talking to Learn: Conversation in a Second Language* (pp. 229-236). New York: Newbury House.
- Chaudron, C. (1983) Simplification of input: Topic reinstatements and their effects on L2 learners' recognition and recall. *TESOL Quarterly*, 17.3, 437-458.
- Good, T., Slavings, R. L., Harel, K. H., & Emerson, H. (1987) Student passivity: A study of question asking in K-12 classrooms. *Sociology of Education*, 181-199.
- Fassinger, P. A. (1995) Understanding classroom interaction: Students' and professors' contributions to students' silence. *Journal of Higher Education*, 66.
- Hsu, W. H. (2001) *How Classroom Questioning Influences Second Language Acquisition*. Ph.D. Dissertation, Univ. of Illinois at Urbana-Champaign.
- Ioup, G. and Krashen, S. D. (1984) Testing the relationship of formal instruction to the input hypothesis. *TESOL Quarterly*, 18.2, 345-350.
- Izumi, S. (2002) Output, input enhancement, and the noticing hypothesis. *Studies in Second Language Acquisition*, 24, 541-577.
- Johnson-Farris, N. (1995) *Active Questioning: Questioning Still Makes the Difference*. Creative Learning Consultants.
- Krashen, S. (1985) *The Input Hypothesis: Issues and Implications*. Torrance, CA: Laredo Publishing Co.

² As pointed out by one of the reviewers, the present study has not yet discussed much about the Output Hypothesis with the collected data. Future researchers may look into this issue.

- Kelch, K. (1985) Modified input as an aid to comprehend. *Studies in Second Language Acquisition*, 7.1, 81-89.
- Long, M. H., & Sato, C. J. (1983) Classroom foreigner talk discourse: Forms and functions of teachers' questions. In Selinger, H., & Long, M. H. (Eds.), *Classroom Oriented Research in Second Language Acquisition*. Rowley, Mass: Newbury House.
- Long, M. H. (1985) Input and second language acquisition theory. In S. M. Gass & C.G. Madden (Eds.), *Input in Second Language Acquisition* (pp. 377-393). Rowley, MA: Newbury House.
- Musumeci, D. (1996) Teacher-learner negotiation in content-based instruction: Communication at cross-purposes? *Applied Linguistics*, 17.3, 286-325.
- Nunan, D. (1990) *Language Teaching Methodology*. Hemel Hemsted, Herts: Prentice Hall.
- Pica, T., & Long, M. H. (1986) The linguistic and conversational performance of experienced and inexperienced teachers. In R. Day (Ed.), *Talking to Learn: Conversation in a Second Language* (pp. 85-98). New York: Newbury House.
- Pica, T., & Doughty, C. (1985) Input and interaction in the communicative classroom: A comparison of teacher-fronted and group activities. In Gass, S. M. & Madden, C.G. (Eds.), *Input in Second Language Acquisition* (pp. 115-132). Rowley, MA: Newbury House.
- Porter, P. (1986) How learners talk to each other: Input and Interaction in task-centered discussions. In Day, R. (Ed.), *Talking to Learn: Conversation in Second Language Acquisition* (pp. 200-222). New York: Newbury House.
- Spada, N. (1986) Relationships between instructional differences and learning outcomes: A process-product study of communicative language teaching. *Applied Linguistics*, 8, 137-155.
- Swain, M. (1985) Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In Gass, S., & Madden, C. (Eds.), *Input in Second Language Acquisition* (pp. 235-256). New York: Newbury House.

- Swain, M. (1988) Manipulating and complementing content teaching to maximize second language learning. *TESL Canada*, 6, 65-83.
- Teng, S. H. (1997) Towards a pedagogical grammar of Chinese. *Journal of Chinese Language Teachers Association*, 32.2, 29-39.
- Tsai, J. H. (2005) L2 acquisition of Chinese questions by English-speaking learners of Chinese. *Journal of Yuannan Normal University*, 3.6. (in Chinese)
- Wagner-Gough, J., & Hatch, E. (1975) The importance of input data in second language acquisition studies. *Language Learning*, 25.2, 297-308.
- White, L., Spada, N., Lightbown, P., & Ranta, L. (1991) Input enhancement and L2 question formation. *Applied Linguistics*, 12, 416-432.
- Young, R. (1988) Input and interaction. *Annual Review of Applied Linguistics*, 9, 122-134.

陳純音

Chun-yin Doris Chen

中文通訊地址

106 台北市和平東路一段 162 號國立臺灣師範大學英語系

英文通訊地址

Dept. of English, National Taiwan Normal Univ., 162 Heping East Rd., Sec. 1,

Taipei, Taiwan 106

chunyin@ntnu.edu.tw

Appendix A: Questionnaire on Class Climate

姓名(Name)_____ 日期(Date)_____

下面共 10 題，請勾選(✓)一個最適當的答案。

Below are 10 statements. Please check (✓) the best answer to each statement.

(1=非常不同意 *strongly disagree*; 2=不同意 *disagree*; 3=同意 *agree*; 4=非常同意 *strongly agree*.)

問題 <i>Statements</i>	1	2	3	4
1.在這個班上，我的同學很支持別人。 <i>My classmates are supportive of each other in this class.</i>				
2.在這個班上，我的同學不尊重別人的看法。 <i>My classmates do not respect others' views.</i>				
3.在這個班上，我們老師很支持我們。 <i>Our teacher encourages us to speak in class.</i>				
4.上課的時候，我的老師只問一些同學問題。 <i>My teacher only asks a few students questions in class.</i>				
5.在這個班上，當別人講話的時候，我的同學會不注意聽。 <i>My classmates do not listen attentively when other people are speaking.</i>				
6.在這個班上，我的同學和我喜歡一起做事。 <i>My classmates and I like to work together in this class.</i>				
7.在這個班上，我不講話的時候，我會有壓力。 <i>I feel under pressure if I do not I speak in class.</i>				
8.我們回答問題的時候，我們老師不會打斷我們。 <i>Our teacher does not interrupt us when we are speaking.</i>				
9.在這個班上，當我不會回答問題的時候，我的老師會幫我。 <i>My teacher helps me when I don't know how to answer questions.</i>				
10.在這個班上，我學得很開心。 <i>I think I have had a great time learning in this class.</i>				

Appendix B: Interview Questions

Part A: Guided Questions for Teachers

1. 為了讓您的學生在課堂上提問或多多參與，您通常會做什麼事來引起他們的動機？
What do you usually do to motivate your students to ask questions or speak in class?
2. 當你的學生無法回答您的問題時，您通常都會怎麼處理？
When your students can't answer your questions, what do you usually do?
3. 當您教的學生程度不一樣時，您問的問題會有所不同嗎？如果會，您覺得為什麼需要不一樣？如果不會，您為什麼覺得不需要區別呢？
Do your questions vary when you teach students at different levels of proficiency? If yes, why yes? If not, why not?
4. 依您的觀察，您的學生最喜歡回答哪一類型或哪種問題？哪一類型或哪種問題是他們最不會或最不擅長回答的？
According to your observation, what kind of questions can your students like to answer best? What kinds of questions are they not good at answering?
5. 依您看，決定您學生在課堂上提問(問問題)頻率的可能因素是什麼？
In your opinions, what are the possible factors that determine your students' frequency of asking questions in class?

Part B: Guided Questions for Students

1. 你對自己這一期的中文學習情形(尤其是說話的能力)整體的表現覺得怎麼樣？
How would you evaluate your improvement from the beginning to the end of the term, especially speaking or Chinese proficiency in general?
2. 你上課時，你通常最會問什麼問題？會用什麼類型的問句來問問題(例如：是非問句、疑問詞問句或其他問句)？

When you are asking questions in class, what kind of questions do you usually ask? What type of question (yes/no questions, wh-questions or other question types) do you usually ask in class? Why?

3. 你這一期上課的內容中，你最喜歡哪一個主題？為什麼？

Of all the topics or the things you have been doing in class, are there any specific topics that interest you most?

4. 你會不會因為上課主題你比較感興趣，所以比較會提問？

Will you ask more questions in class because the topics of the textbook interest you?

5. 上課時，你希望老師做些什麼事引起你問問題或說話的動機？

What do you expect your teachers to do to motivate you to ask more questions or speak more in class?

從語言輸入到語言輸出： 以華語爲第二語言提問的個案研究

陳純音
國立臺灣師範大學英語系

摘要

本論文旨在探討以華語爲第二語言的教室中師生之提問。研究對象爲就讀於國立臺灣師範大學初、中、高三級共六個班的外籍學生及其任課教師，藉由教室觀察及錄影及錄音等方式，蒐集師生互動語料，錄影及錄音方式。針對師生提問所用之問句依語法類型（如：選擇問句、正反問句、附加問句、助詞問句及疑問詞問句）及語用功能（如：指涉型、展示型）加以分類。此外，並以問卷及訪談方式調查學生對提問及課堂氣氛的看法。研究發現，教師較常使用助詞問句與疑問詞問句引導學生進行語料輸出。此結果與學生提問之問句類型及分布情形相似，顯示語言輸入強化之影響深遠（White et al., 1991; Izumi, 2002）且外籍學生誠如 Johnson-Farris（1995）所提，傾向藉由提問讓人了解。

關鍵詞：語料輸入假設，語料輸出假設，提問，以華語爲第二語言

Production of Mandarin Chinese Nasal Coda by L1 and L2 Speakers of Mandarin Chinese

Yi-Hsiu Lai

**Department of Western Languages and Literature,
National University of Koahsiung**

Abstract

The current study addressed to what extent the murmur and vowel make contribution to the place of articulation distinction in Mandarin Chinese nasal codas. Ten speakers of Mandarin in Taiwan and ten speakers of Burmese who learned Chinese as a second language (CSL) participated in the present research. They articulated the alveolar-velar nasal pairs (i.e. [-n] vs. [-ŋ]) embedded in three vowel contexts ([i], [ə], [a]) with the rising tone. Nasal production of each subject was examined from the perspective of four acoustic cues, including formant transition in vowels, degrees of nasalization, vowel duration, and nasal murmur duration. Results revealed that the spectral difference and nasalization play important roles in the Mandarin syllable-final nasal contrasts. Speakers of Mandarin in Taiwan significantly distinguished the [an]-[aŋ] pair in formant transition and nasalization, but failed in the other pairs ([in]-[iŋ], [ən]-[əŋ]). This finding to some extent reflected the nasal merging in Mandarin production in Taiwan. Though endowed with a more marked L1 nasal system, CSL learners from Burma merged Mandarin nasal codas to a greater degree. Their confusion in producing Mandarin nasals was a major result from the merging nasals of the target language.

Key words: Acoustics, Mandarin Chinese nasal codas, Chinese as a Second Language (CSL)