Research

UNDERSTANDING TEACHER QUESTIONS THROUGH CONVERSATION ANALYSIS

ML. Jirapa Abhakorn

National Institute of Development Administration (NIDA), Thailand
Email: jirapa.abhakorn@nida.ac.th

Abstract

Conversation analysis (CA) has been applied to examine the organizations of various different types of teacher talk, through the observation, description and analysis of naturally occurring classroom interactions. This present article illustrates the micro-analytic process of examining one of the most predominant forms of teacher talk – *teacher questions*. The patterns of question will be described based on CA approaches, and further discussed from the perspectives of institutional talk and second language acquisition (SLA), to demonstrate the existence of a reflexive relationship between interaction and classroom context, and a relationship between interaction and language pedagogy.

Keywords: Classroom research, Classroom Interaction, Conversation Analysis, Teacher questions.

การทำความเข้าใจคำถามของครูโดยการวิเคราะห์บทสนทนา

บทคัดย่อ

การวิเคราะห์บทสนทนา (CA) ได้ถูกประยุกต์ใช้ในการตรวจสอบรูปแบบต่างๆในการพูดของครู โดยการสังเกต คำอธิบายและการวิเคราะห์ปฏิสัมพันธ์ที่เกิดขึ้นตามธรรมชาติในชั้นเรียน บทความนี้นำเสนอกระบวนการวิเคราะห์แบบย่อ ในการตรวจสอบรูปแบบเด่นๆที่สุดของการพูดของครู – นั่นก็คือการถาม

คำถามของครู รูปแบบของคำถามจะอธิบายโดยการใช้วิธีต่างๆในการวิเคราะห์บทสนทนา   เพื่ออธิบาย เพิ่มเติมจากมุมมองของการพูดในสถาบันและการเรียนรู้ภาษาที่สอง (SLA) ซึ่งแสดงให้เห็นถึง ความสัมพันธ์ระหว่างปฏิสัมพันธ์สะท้อนกลับและบริบทการเรียนในห้องเรียนกับความสัมพันธ์ระหว่าง การปฏิสัมพันธ์และวิธีการสอนภาษา

Introduction

Teacher Questions as Socially-Achieved Actions

Teachers' questioning, as one of the elicitation methods, has been the focus of research in both content classrooms and language classrooms for many years (Brock, 1986). Some of the reasons for the interest of many researchers in investigating teacher questions were the frequency of the use of questions which are also relatively easy to observe, document and analyze, and the importance of questions to language pedagogy (Nunan, 1991). Teachers use questions to elicit information or to encourage participation from students. It is, however, worth mentioning that the functions of utterances in the classroom in eliciting information from students are not conveyed only in the grammatical form of questions. Other forms of teacher talk (e.g., incomplete utterances) can also be understood by students as performing the task of questioning (Mehan, 1979a). On the other hand, some forms of question may not receive any response from students. This is because teacher questions are social actions, which means that the function of an utterance from the teacher in eliciting information from the students is developed, interpreted and accomplished through and in interactions between teachers and students. Thus, it is important to explore and to understand this process of co-constructing the meaning of question which is embedded in social interaction in micro-detail.

This article views teacher questions as socially-achieved actions which encompass not only cognitive but also social activities. Teacher questions are a cognitive practice because it involves the teacher as an agent, a motive (a reason for acting), and a purpose (a plan) behind carrying out the question (Bronckart, 1995: 77). Teachers convey meanings of utterances as questions through talk by referring to knowledge of interactional norms. Students also refer to knowledge of interactional norms when interpreting and providing appropriate responses to teacher questions. The accomplishment of questions thus relies on the competences of both the teacher and the

students, or the abilities to transfer, interpret, negotiate and construct common meanings of questions. Therefore, teacher question is also a social practice because it constitutes a phenomenon the meaning of which needs to be interpreted and understood by the students. Teacher and students conjointly do interactional work to establish intersubjectivity and the meaning of the utterances as questions. Classroom researchers can study, through this interactional data, the process through which the negotiation for meaning of teacher question is co-constructed between the teacher and learners.

The main aim of this article is to introduce *classroom ethnography* and CA as the methodological approach to studying classroom interaction in order to discover new sorts of teacher questions and to confirm or disconfirm the existing assumptions regarding various types of teacher question. In addition, it will explore the process of co-constructing meaning and the constitutive competences involved in producing, interpreting and negotiating the meanings of teacher questions through the sequential analysis of teacher questions. The description of teacher question will not be limited to the pre-established classifications of teacher questions, but different characteristics of teacher questions will be allowed to emerge from the interactional data and will be described from an *emic* perspective: based on how the questions are understood by the students. The detailed description of classroom interaction will pave the way for an understanding of the various actions teacher and learners engage in co-constructing teacher question sequences, and for identifying the different types of teacher question. In classroom research, it is important to understand how teacher and students engage in various activities of question and response in order to identify the characteristics of questions which may develop or hamper language development. This present article will also show how the analysis of classroom interaction can be elaborated based on theories of in *Second Language Acquisition* (SLA).

The Previous Research on Teacher Questions

Most of the previous research into teachers' acts of eliciting information from students in language classrooms has focused on the functional categorization of *English as a second language* (ESL) teachers' questions (Long & Sato, 1983), counting the frequency of use of different question types (White & Lightbown, 1984), and describing the functions of different

types of teacher questions (Brock, 1986; Nunan, 1987). A number of previous studies have endeavored to show which types of question are more conducive to developing communicative classrooms, which share the communicative characteristics of regular conversation outside classrooms (Brock, 1986; Nunan, 1987). For example, *Communicative Orientation in Language Teaching* (COLT) was developed as an observation scheme for the measurement of communicative orientation in second language and bilingual classrooms (Allen et al., 1990).

Particular attention has been paid to the categories of 'display questions' and 'referential questions' (Long & Sato, 1983). Earlier research focused on evaluating these two major types of teacher question. The use of referential questions in the classroom is believed to be more effective because referential questions help increase the amount and complexity of learner output and help in developing the use of the target language for genuine communication, or the communication that shares the characteristics of regular conversation outside the classroom (Brock, 1986; Nunan, 1987, 1991). The frequent use of display questions, on the other hand, is associated with the teacher's role as knowledge educator and assessor, and the display question is one of the features that distinguishes classroom talk from regular conversation.

The disadvantages of the functional categorization research

These functional categorization studies have provided some important ideas about teacher questions which are relevant to the development of language pedagogy. However, the categorization results are too static. They cannot provide an adequate explanation of the more complex interactional characteristics and functions of teacher questions in the language classroom. In addition, the presumption that referential questions alone are responsible for developing communicative classrooms (Brock, 1986; Nunan, 1987) seems to be an overly simplistic view of teacher questions.

The functional analysis of teacher questions was conducted from an *etic* perspective, and it focused heavily on teachers' competence in conveying the meanings of their questions to students, as if the question was an individual phenomenon. The students' analytic competences and ability to provide answers to the teacher's questions, and thus to accomplish the function of question, were not mentioned. The etic perspective interprets the meanings

of the teacher's utterances from the analyst's viewpoint. It does not describe the meanings of the questions as products of contingent and intersubjective communication between teacher and students, and fails to uncover the competence of either the teacher or the students to collaborate in constructing and achieving meaningful communication. According to Clayman and Gill (2004: 597), the problems associated with etic analyses are (1) they may be misguided; (2) they are conditioned by the immediate interactional context in which they are produced and are couched in vernacular terms that are generally inadequate to meet the demands of social scientific inquiry.

The Study of Teacher Questions through the Analysis of Language Classroom Interaction

Many of the recent classroom research have applied the CA approach and the emic analysis to analyze institutional talk as locally produced by participants, and may be influenced by institutional constraints. *Emic* analysis is based on an examination of the understandings and orientations of the participants themselves. The sensitivity of an emic approach to what is going on in the interaction makes it more useful in the study of classroom interaction than an etic approach because 'the understandings that matter are those that are incarnate in the interaction being examined' (Schegloff & Sacks, 1973). In addition, an emic analysis would allow researchers to explicate the competencies through which the participants conjointly accomplish meaningful communication, and to understand meanings or senses which are conjointly negotiated and agreed upon in the talk (Firth & Wagner, 1997). CA can be conducted to study the organization of interaction from an emic perspective and to understand the goals and roles of the classroom context.

The Principle of Conversation Analysis

CA is a detailed analysis of the transcribed data of talk occurring in natural situations. It was developed by Harvey Sacks and his co-workers in 1960 with the belief that there was 'order at all points' in conversation; thus everything that happened in conversation could be described in terms of the underlying methods participants used to produce and understand it.

The main aims of CA are to characterize orders or organization of 'talk–in–interaction,' and to uncover the methods which interactants use to develop mutual understanding and achievement of these organizations of interaction. CA has its root in ethnomethodology and it shares the two major principles of ethnomethodology as described by Bryman (2001: 355) which are *indexicality* and *reflexivity*. Indexicality is the belief that the meaning of an act is influenced by the context in which it is located. Reflexivity means that social actions are constitutive of the social context in which they occur. In addition, basic principles underlying CA as proposed by Heritage (1984), are:

- *Talk is structured*: there is implicit norms of order and organization of talk–in–interaction, which the participants orient to, and so the analyst should follow and uncover this implicit pattern of talk–in–interaction.

- *Talk is forged contextually*: participants constantly interpret talk–in–interaction. The meaning of talk–in–interaction is shaped by the preceding turn ('context–shaped') and at the same time it forms a basis for interpretation of meaning for the next turn ('context–renewal'). Since this is the case, talk must be interpreted by referring to the sequential context in which it occurs. The meaning of talk–in–interaction must be interpreted in context, and the talk itself is constitutive of the context in which it occurs.

- *Analysis is grounded in data*: talk–in–interaction must be studied in naturally–occurring situations. The analysis should be conducted without pre–assumptions that any background details or contextual factors, such as power, gender, race, are relevant except those factors are oriented to by the participants in the sequence of the talk. Therefore, the talk must be analyzed in detail, and no specific details of an interaction can be ignored, or regarded as disorderly, accidental or irrelevant.

When they engage in conversation, participants behave according to certain sorts of methodical procedures and orient to norms that govern the order of interaction. Some examples of normative interactional organization according to Sacks (1992) are:

- *Turn–taking*: the fundamental finding of Sacks et al. (1974) concerned the organization and transition of turns which help

interactants accomplish social interactions. Turn units can be produced in different forms of verbal and non–verbal actions. The basic principle is that one speaker talks at a time. The actions deviating from normative turn–taking are usually in the forms of *overlap* and *interruption*.

- *Adjacency pairs:* the most basic feature of adjacency pairs is the structure of two linked turn types produced by different speakers. These two turns are relevantly ordered; the first act ('initiative act') implies that the second act ('responsive act') of the adjacency pair will be forthcoming (Schegloff & Sacks, 1973: 295). The second act is an interpretation of the previous act, and at the same time it creates a context which shapes the subsequent act. Failure to provide the normative second act is normally accounted for; otherwise it is accountable and sanctionable.

- *Preference order:* an order of asymmetrical alternative types of the second pair part which the first pair part makes relevant. The second pair parts which show alignment to the first pair part and allow for the accomplishment of the activity are referred to as 'preferred actions.' The second pair parts which display non–alignment and block the accomplishment of the activity are called 'dispreferred actions' (Schegloff, 2007: 59). These two options are performed in different forms of language and non–language. Dispreferred actions are deviations from the norms and are thus subject to question and sanction, and they lead to the expansion of the sequence.

- *Repair:* organizations of repair initiation and correction which are performed when there is 'trouble' or miscommunication in an interaction. Four types of normative repair organization are: (1) self–initiated repair, (2) other–initiated repair, (3) self–repair, and (4) other–repair (Schegloff, 2007: 101). These are related to the organization of preference, since particular repair organizations are more preferred than others.

The orders in the interactions are made explicit, described and analyzed by the analyst. These interactional organizations reveal the process through which the interactants interpret meanings and develop mutual understanding of the meanings of social actions and the rules of interaction in order to accomplish social interaction. The organization of interaction and its

developing processes are the central focus which CA researchers seek to understand, and when this journey is completed it will help specify social realities and the interactional work that does make a difference in professional outcomes.

The Application of CA to the Study of Teacher Questions

According to Drew & Heritage (1992), an institution including a classroom has its core tasks to be achieved and an organization of talk which is basically task–oriented and organized to pursue the institutional goals and roles. 'Talk–in–interaction' in institution is organized by participants who orient to the institutional core task, goals and roles. The core goals of the language classrooms and the roles of the teachers are to teach English and to use English as both the object of study and the means of interaction. The features of interaction in the language classrooms are uniquely organized in relation to these core goals and roles.

Studies which apply CA methodology to examine interaction in the language classrooms (Mehan, 1979a; Drew & Heritage, 1992; McHoul & Rapley, 2001; Seedhouse, 2004; Walsh, 2006) try to establish a link between the micro level of social interaction and the macro level of social goals and roles of the classroom. This means that CA methodology is applied to study how the social facts of being an institution or a language classroom are accomplished in an interaction. To apply CA to study institutional talk, Schegloff (1991) identifies two important concerns which can help analysts to convert their intuition or theoretically motivated observation into demonstrable analysis. *First*, research should demonstrate the local relevance for participants of their institutional contexts and identities. *Second*, research should also show the impact of institutional contexts and identities in procedurally consequential terms. A specification of such a linkage between institutional contexts and their procedural consequentiality helps an analyst to examine, understand and give an account of how the interaction proceeded in the way in which it did: how it came to have the trajectory, the direction, and shape that it ended up having.

Interactional features such as turn–taking, adjacency pairs, preference order and repair are also studied when analyzing institutional talk. In addition, more organizations of interaction commonly found in the language

classrooms are shown below. It is important to note that these are normative organizations; they could be shaped in various ways depending on the goals and roles that the teacher aims to transfer. The students consistently interpret the meanings of the goals and roles transferred and the interpretation is described and analyzed by the CA analyst.

- *The three–turn sequence organization* (IRE/IRF) (Sinclair & Coulthard, 1975; Sinclair, 1982): the sequence organization in classroom interaction in which the first (Initiation) and second (Response) turns form an adjacency pair, and the third turn (Evaluation or Follow–up) forms the 'sequence–closing third' (Schegloff, 2007: 118).

- *Use of LI*: some studies based on ethnographic and micro–analytical approaches (Martin–Jones, 1995, 1997; Simon, 2001; Üstünel & Seedhouse, 2005) have attempted to investigate how LI is actually used in language classrooms. They found that the use of LI is highly ordered, and LI is used to perform both pedagogical and social functions in the language classroom.

The expected outcomes go beyond an understanding of interactional organization, toward an understanding of the social facts of the institution that are accomplished in social interaction and the implications of such understanding for the further development of professional practices.

Data Collection and Analysis

Naturally occurring classroom interactions should be first collected and transcribed for further analysis inductively based on the framework of CA and language classroom ethnographic research. The procedure for the detailed analysis of the teacher questions, which is shown below, is adapted from Seedhouse's (2004) stages of CA research.

1. Locate the acts of teacher questions.
2. Characterize questions by looking at the nature of students' responses to the questions.
3. Characterize language form in the question performed.
4. In each sequence of teacher question–student response:
   a) describe it in terms of: e.g., (1) turn-taking, (2) sequence of actions or adjacency pairs, (3) preference, and (4) use of LI

b) uncover the emic logic underlying each turn of interaction by following Sacks et al.'s (1974: 729) *next-turn proof procedure*, to describe the subsequent turn as an interpretation of the previous turn, and how it creates an action and interpretational template for subsequent actions;

c) examine the process through which the organizations of teacher questions‒student responses are co-constructed through interaction;

d) examine what teachers try to accomplish through the questions;

e) uncover any roles, identities or relationships which are evident in the data.

Data Analysis and Discussion: the Teacher's Use of Display Choice Questions

This section will demonstrate how to analyze the teacher's use of display choice questions to call for the students to decide whether the information given is right or wrong or to pick the answer from among several options presented to them.

A) Teacher provides display information to allow students to decide whether 'right or wrong': The teacher uses display choice questions to provide information and to prompt the students to respond whether they agree or disagree with the information given.

Extract I:

1. T: →*nɔ̌ːk tɕàːk niː kʰam tʰǎːm kʰɯ̂n tôn dûɛj* when *tɕà tɔ̌ŋ tɔ̀ːp pen*

2. *weːlaː lɛ̀ːw kʰruː tʰǎːm pen wan dɯan piː dôj mɔ̌j*
   (*In addition to questions starting with* when *which need answers in the form of time, I will use them to ask for the date, can I do that?*)

3. Ss: *dôj*
   (*Yes*)

In Extract I, the teacher is teaching how to use the 'when'-question in English. The teacher and students switch to Thai during the teaching about English grammar. The switch to Thai may serve the teacher's focus on providing clear instruction about English grammar rather than on developing classroom communication in English. Lines 1-2 show that there is more than

one act in this turn. First, the teacher reminds the students of the answer they have produced, that the question starting with 'when' is used to ask for time. Next, she gives information about using 'when' to ask for the date, and then asks the students whether that can be done or not. The teacher designs her turn by using *'in addition'* to link the first act of reminding the students about previously learnt information to the second act of giving new information and the third act of question. The marker *'in addition'* may be used as a resource to lead the students to notice the similarities between the uses of 'when' questions to ask for the time, to ask for the date, and that both forms are correct. Rather than just telling the students what she knows, she lets them decide whether the second application of 'when' to ask for the date is right or wrong. Through the question, the teacher also provides support to the students in giving an appropriate response. The question is accomplished when the students provide the correct answer *'dôj* (*Yes*) in line 3. A similar example is shown in Extract 2, which is from the teaching of the past tense. The display questions are started by the teacher's giving information first, and ending with the question words *'or not?'*

Extract 2:

1. T: Read *pʰɔ: pen tɕʰɔ́:ŋ sɔ̌:ŋ pliːan pen* red
   (Read, *the past tense is* red.)
2. Ss: red
3. T: →*nâː taː mǔːan dɤ́ːm mɔ̂j*
   (*Does it look like the present tense form, or not?*)
4. Ss: *mǔːan=*
   (*The same.*)
5. T:→ =*tæː àːn mǔːan dɤ́ːm mɔ̂j*
   (*But is it pronounced in the same way, or not?*)
6. Ss: *mɔ̂j* [*mǔːan*
   (*Not the same.*)
7. T: [*àː mɔ̂j mǔːan nâː taː mǔːan dɤ́ːm tæː tɕʰɔ́:ŋ sɔ̌:ŋ àːn pen*
8. red read red red
   (*Right, not the same. The past tense form of read looks the same as the present form but it is pronounced* 'red', read red red.)

In line 1 the teacher begins by giving the information that the past tense form of 'read' is written in the same way as the present tense form. Then in line 3 she ends the turn with '*or not?*' which is used as an interactional resource by the teacher to introduce the pedagogical focus of testing the students' knowledge. The students respond in normative orientation to the pedagogical focus. In line 4 the students reply that they are written in the same way, but the response does not receive evaluation. The teacher moves on to the next question in line 5. In this line the new question is started with '*But*', and information is added to ask the students whether the past tense form of 'read' is pronounced in the same way as the present tense form. The use of '*But*' shows how the teacher endeavors to point out that the answer to the question in line 5 is different from the previous answer to the question in line 3. In other words, the teacher gives a clue that the past and present tenses of 'read' are written in the same way, but they are not pronounced in the same way. The students' answer of '*mɒ̌j mɯ̌ːan*' (*Not the same*) in line 6 receives a positive assessment from the teacher in line 7. Together with an acceptance '*Right*' and a repetition of the answer to confirm its correctness, the teacher elaborates on the students' contributions by adding information: '*The past tense form of read looks the same as the present form but it is pronounced* red, read red red'. The students may be able to provide the correct answer based on their language knowledge of the past tense form of 'read', and from their interpretive competence in understanding this clue provided by the teacher.

B) Teacher provides display information to let students decide 'which one': The teacher uses display choice questions to provide information and to prompt the students to select, from among the choices presented to them, which one is the correct answer.

Extract 3:

1. T: →Stress *pʰaǰa.ŋ nɒ̌j faŋ mɒ̀j si? kʰá* con gra tu la↑ tion
   (Stress *on which syllable? Listen again* 'congratulation')
2. Ss: Con gra tu la↑ tion
3. T: → *pʰaǰa.ŋ nɒ̌j tʰíː* stress
   (*Which syllable is* stressed?)
4. SI: [One
5. T: → [Con gra tu la↑ tion ((using fingers to help counting))
6. T: (2.0) ((looking around the class))

7. SI: One
8. T: ((underlining 'la' on the board))
9. T: *aw mǒj ɔːk sǐːaŋ eːŋ sí kʰá*
   (*Pronounce it again by yourself.*)

In Extract 3 the teacher is teaching English vocabulary and pronunciation. Lines 1-2 show language drill activity. The teacher repeats the word 'congratulation' slowly and clearly for the students to repeat after her. In line 3 the teacher asks the students to choose from among the five syllables which one is stressed. The question is in the form of switching between LI and L2. The phrase in LI *'pʰája.ŋ nǒj tʰíː'* (*'which syllable'*) and the English word 'stress' are used as parts of the question in line 3. The switch to English at the end of the question in line 3 may influence the SI in providing the answer in English in line 4. By saying 'One', SI provides a response selected from the information given, that the first syllable is stressed. However, the reply is not the correct answer and this can be seen from the teacher's evaluation in the subsequent turn. In line 5 the teacher does not give an evaluation but repeats the word with a rising intonation at the fourth syllable and uses her fingers to help count the syllables.

The repetition of the response with a questioning intonation indicates that the response is not acceptable (Cullen, 2002; Hellermann, 2003). In line 7 SI insists that it is the first syllable which is stressed. SI's reply implies that she interprets the teacher's repetition of the word as a re-question. She does not understand the question as calling for a repair, nor does she realize that her answer is problematic to the teacher. The teacher does not give any assessment of SI's answer. Without any explicit evaluation or explanation she underlines the syllable 'la' on the board and moves on to direct the students to read this word.

The example shown in Extract 3 shows that although this question is followed by the symmetrical type of reply, which is an answer selected from the information given, the information given in the reply is not correct. This can be seen from the way the teacher uses resources to prompt the students' repair. After the second attempt, the teacher stops eliciting the correct response by providing the answer herself (underlining 'la' on the board). In this extract, after the teacher has provided the answer in line 8, there is no evidence that the students have learned from the teacher that 'la' is the

stressed syllable. In addition, there is a lack of direct response from the teacher elaborating on SI's understanding that the first syllable is stressed. SI's understanding is ignored by the teacher, since the teacher appears to want to obtain the answer that she expects.

Extracts 4 shows how the teacher provides display choices and lets the students decide which one is correct, in a form of initiation for repair. As in McHoul's (1990) study of repair organization in classroom talk, 'teacher initiation for repair' in this classroom refers to when conversational troubles are caused by the students and the teacher points out the problem but leaves the work of correction to the students. The students select the correct answer from the choices given.

Extract 4:

1. T: *tɔ:pɑj* number seventeen *kʰɔ̂: sùt tʰâ:j (.) âw* read
    (*Next*, number seventeen, *the last question*, read.)
2. Ss: What is your mother take care your [when you ((reading))
3. T: → [You *rɯ́* your *kʰá*
    (You *or* your?)
4. Ss: You↑
5. (2.0)
6. Ss: you when you [when ((reading))
7. T: [when you were a ba↑by
8. Ss: When you were a ba↑by

In Extract 4 the students are reading the question in the textbook. In line 2 the students read '...take care your...' which is not correct, thus questionable. More than one student makes the same mistake in line 2. The teacher initiates a repair in line 3, overlapping with the students' turn, using a choice question 'You *rɯ́* your *kʰá* (You *or* your?). This question is contingently developed in the course of the interaction as a reaction to the students' response in line 2 and it shows the teacher's analysis of the students' response. Instead of giving a direct correction, she initiates the students' correction by giving the subsequent turn to the students to find the right answer. In one turn (line 3) she gives a display choice of a different answer –'you', and an answer the students have produced –'your', and invites

the students to choose which one is correct. The students' repair in line 4 shows their competence to recognize that their previous response may be problematic, and the competence to repair. More than one student provides the repair. It is interesting that the students in this class provide responses in groups far more often than replying individually or bidding for a reply. Sometimes they make the same mistake and provide a repair in the group.

Conclusion

In summary, some interesting new findings have emerged from the detailed analysis of the display- choice questions as products of collaborative work between the teacher and the students. The Thai EFL teacher does not just give a one-way lecture; instead she uses numerous display choice questions to deal with previously learned information and to provide new information as a resource for the students to analyze. The teacher allows the students to analyze the new information provided by ending the talk with an question which calls for the students' confirmation of whether the information given is correct or not. The students are given the opportunity to analyze the information and the teacher has a chance to test the students' understanding of the information provided. The advantage of using display choice question, compared with giving information only, is that the teacher can check whether the students are paying attention to what she is saying and can also check their understanding of the content. Students are given more opportunity to be involved in the process of transferring new information through display choice questions compared with receiving a one-way lecture. To complete these choice-question sequences, students' collaborative responses are required. There are some cases where the teacher's questions are followed by her provision of answers, and this does not perform equivalent functions of question to those described above.

The students have been found to answer in chorus throughout the extracts thus far, which may be owing to the fact that the teacher does not nominate individual students to respond but allows any students to provide the answer. As Lerner (1993) points out, 'a question from the teacher addressed to the class as a whole can make relevant whole class (i.e., choral) response' (p.218). The question about English grammar to the whole class shows that the teacher expects many students to know the appropriate answers and this means it is acceptable for the students to provide the same

answer in chorus to this type of display question. In accepting choral responses she is treating the students as a sort of 'single knowledge unit'– as though there are no differences in individual understanding. The students are also construing themselves in the same way by speaking or acting together as an association.

This research has also contributed to an understanding of socially constructed classroom interactions and provided some principles for studying classroom talks which should be useful for future language classroom research. Instead of giving teachers or people who participate in practical educational circumstances a prearranged package of teaching directions or instructions, this ethnographic research provides them with ways of looking into their own classroom behavior and reminds them of their responsibility to understand their own situations and to develop in ways they think appropriate.

Although the detailed analysis of classroom interaction seems to be as very complex as the conversation itself, and hence difficult to conduct, there are many advantages and limitations of applying CA as a research methodology as have been discussed elsewhere in this research. As a consequence, CA may be used in combination with other research tools, such as classroom observation, and interviews to study classroom interactions and implementation to language learning and teaching.

References

Brock, C. A. 1986. 'The effects of referential questions on ESL classroom discourse', *TESOL Quarterly* 20: 47-59.

Bronckart, J. 1995. 'Theories of action, speech, natural language, and discourse', in Wertsch, J.V. Del Rio, P. and Alvarez, A., (eds.) *Sociocultural studies of mind* (Cambridge: Cambridge University Press).

Bryman, A. 2001. *Social research methods* (New York: Oxford University Press).

Clayman, S. E. and Gill, V. T. 2004. 'Conversation analysis', in Hardy, M. & Bryman, A., (eds.) *Handbook of data analysis* (London: SAGE).

Cullen, R. 2002. 'Supportive teacher talk: the importance of the F-move', *ELT Journal* 56: 117-127.

Drew, P. and Heritage, J., (eds.) 1992. *Talk at work: interaction in institutional settings* (Cambridge: Cambridge University Press).

Firth, A. and Wagner, J. 1997. 'On discourse, communication and (some)

fundamental concepts in second language acquisition research', *The Modern Language Journal* 81: 285-300.

Hellermann, J. 2003. 'The interactive work of prosody in the IRF exchange: teacher repetition in feedback moves', *Language in Society* 32: 79-104.

Heritage, J. 1984. *Garfinkel and ethnomethodology* (Cambridge: Polity).

Long, M. H. and Sato, C. 1983. 'Classroom foreigner talk discourse: forms and functions of teachers' questions', in Selinger, H. and Long, M. H. (eds.) *Classroom oriented research in second language acquisition* (Rowley, MA: Newbury House).

Martin-Jones, M. 1995. 'Code-switching in the classroom: two decades of research' in Milroy, L. & Muysken, P. (eds.) *One speaker, two languages: cross-disciplinary perspectives on code-switching* (Cambridge: Cambridge University Press).

Martin-Jones, M. 1997. 'Bilingual classroom discourse: changing research approaches and diversification of research sites', in Hornberger, N. H. and Corson, D. (ed.) *Encyclopedia of language and education volume 8: research methods in language and education* (Dordrecht: Kluwer Academic Publishers).

McHoul, A. 1990. 'The organization of repair in classroom talk', *Language in Society* 193: 49-377.

McHoul, A. and Rapley, M. 2001. *How to analyze talk in institutional settings: a casebook of methods* (London: Continuum).

Mehan, H. 1979. *Learning Lesson: social organization in the classroom* (Massachusetts: Harvard University Press).

Nunan, D. 1987. 'Communicative language teaching: making it work', *ELT Journal* 41: 136-145.

Nunan, D. 1991. *Language teaching methodology* (New York: Prentice Hall).

Sacks, H. 1987. 'Notes on methodology', in Atkinson, J. M. & Heritage, J. (eds.) *Structures of social action: studies in conversation analysis* (Cambridge: Cambridge University Press).

Sacks, H. 1992. 'Turn-taking, the notion 'conversation'; noticeable absences' greeting; adjacency', in Jefferson, G. (ed.) *Lectures on conversation, vol. 2* (Oxford: Blackwell).

Sacks, H., Schegloff, E. A. and Jefferson, G. 1974. 'A simplest systematic for the organization of turn taking in conversation', *Language* 50: 696-735.

Schegloff, E. A. 1991. 'Reflection on talk and social structure', in Boden, D. and Zimmerman, D. (eds.) *Talk and social structures: studies in ethnomethodology and conversation analysis* (Oxford: Polity).

Schegloff, E. A. 2007. *Sequence organization in interaction: a primer in conversation analysis* (New York: Cambridge University Press).

Schegloff, E. A. and Sacks, H. 1974. 'Opening up closings', *Semiotica* 8: 289-327.

Seedhouse, P. *The interactional architecture of the language classroom: a conversation analysis perspective.* Oxford: Blackwell, 2004.

Simon, D. L. 2001. 'Towards a new understanding of codeswitching in the foreign language classroom', in Jacobson, R. (ed.) *Codeswitching Worldwide II* (New York: Mouton de Gruyter).

Sinclair, J. M. 1982. *The structure of teacher talk* (Birmingham: English Language Research).

Sinclair, J. M. and Coulthard, R. M. 1975. *Towards an analysis of discourse* (New York: Oxford University Press).

Üstünel, E. and Seedhouse, P. 2005. 'Why that, in that language, right now? Code-switching and pedagogical focus', *International Journal of Applied Linguistics* 15: 302-325.

Walsh, S. 2006. *Investigating classroom discourse* (Cambridge: Routledge).

White, J. and Lightbown, P. M. 1984. 'Asking and answering in ESL classes', *Canadian Modern Language Review* 40: 228-244.

APPENDIX: TRANSCRIPT NOTATION

The extracts included in this research have been transcribed according to CA transcript notations available in Atkinson & Heritage (1984), and Seedhouse (2004).

Transcript Notation

T	Teacher
Ss	More than one student
Sl	Single student
::	lengthening of the preceding sound.
↑	higher pitch in the utterance
°	utterance quieter than surrounding talk
(unintelligible)	indicates unintelligible utterances
(.)	micro-pause
(2.0)	number in parentheses indicates seconds of silence
((gesture))	non-verbal actions
?	rising intonation
<u>Underline</u>	speaker emphasis
=	the second speaker followed the first speaker without discernible silence between them
-	Abrupt cut-off
[ ]	point of overlap

Thai Transcription

tʰɑj	International Phonetic Alphabet (IPA) with Phonemic Tones
	(Source: www.thai-language.com)
(*Thai*)	English Translations