TURN TAKING IN MATH TUTORIAL SESSION: A CONVERSATION ANALYSIS

Rosyida Ekawati*

Abstrak: Percakapan selama kursus privat Matematika antara siswa dan guru adalah Analisis Wacana interaksi interpersonal. Banyak jenis interaksi interpersonal juga menggunakan organisasi bergiliran seperti halnya percakapan biasa. Analisis Percakapan mempelajari berbagai hal yang mendasari percakapan: bagaimana semua yang terlibat dalam percakapan bergantian bicara, bagaimana mereka berorientasi terhadap kedua ucapan lainnya, dan juga konteks sekitarnya. Bergiliran bicara yang dilakukan oleh guru dan siswa dalam kursus privat Matematika umumnya dalam bentuk tanya jawab dengan menggunakan kata-kata tunggal atau frase-frase tunggal. Alokasi giliran bicaranya juga dapat dikenali dengan adanya jeda dan intonasi, serta adanya tumpang tindih berbicara yang terjadi selama percakapan.

Kata kunci: Interpersonal, Giliran, Analisis Percakapan, Analisis Wacana

Introduction

Communication happens if at least two participants who meet together in a particular occasion and talk about particular topic. Moreover, Sacks (1974) says that conversation can be held if some aspects of the conversation are fulfilled such as : participants, topic and setting. Participant can be divided at least into the speaker and listener or the first speaker and the second speaker. They usually share information or exchange ideas and these activities causes conversation.

All interactions involve the use of some kind of turn-taking organization (Sacks, Schegloff and Jefferson 1974), and many kinds of interpersonal interaction use the same turn-taking organization as ordinary conversation. Some, however, involve very specific and systematic transformations in conversational turn-taking procedures. These special turn-taking systems can be very important in studying interpersonal interaction because they have the potential to alter the parties' opportunities for action, and to recalibrate the interpretation of almost every aspect of the activities that they structure.

Turn-taking is one of the basic mechanisms in all types of dialogues and 'multilogues' (conversations involving more than two people) and the convention of turn-taking varies between cultures and languages; therefore, learners of a foreign language may find it difficult to take their turns naturally and properly in other tongues.

In this conversation two speakers are participating. They are : T, a Filipino tutor who speaks English, and S, an Indonesian pupil who is non-English-speaking person; English is his foreign language. The conversation was conducted in pupil's house for Math tutorial session. This conversation takes a close look at unplanned, spontaneous and interactive conversation,

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* Rosyida Ekawati adalah dosen Program Studi Sastra Inggris FISIB Universitas Trunojoyo Madura

and thereby provides an enough database for analyzing the organization of conversation.

As the conversation took place between an Indonesian and a Filipino, while the Indonesia pupil is not a speaking-English-person; English is still considered to be his foreign language and the Filipino is a speaking English person, so that it is assumed that there is a barrier/gap between the participants in the conversation. The study is important to do because in this conversation the participant has different background and English language acquisition, indeed, the conversation runs well during the tutorial session. It means that both participants achieve mutual understanding.

Study Framework

Conversation Analysis (CA) is an approach because CA can show a direct connection between talk and its setting. CA focuses on how people's everyday interaction is organized, and how participants show that they understand and orient towards each other's actions. CA studies the underlying organization of conversations: how the turns at talk are shaped, how they are oriented towards both other utterances, and the surrounding context.

The principles of CA

Although CA is subsumed within ethnomethodology, CA does have its own subset of principles. Markee (2000) defines four aims of CA, which manifest similar features to the four principles delineated by Seedhouse (2004).

- There is order at all points in interactions; Conversation has structure.
- Contributions to interaction are context-shaped and context-renewing; Conversation is its own autonomous context.
- No order of detail can be dismissed a priori as disorderly, accidental, or irrelevant; The study of conversation requires naturally occurring data.
- The analysis is bottom-up and data driven; There is no a priori justification.

Conversation Analysis

Conversation Analysis (CA), a research tradition that grew out of ethnomethodology, has some unique methodological features. It studies the social organization of 'conversation', or 'talk-in-interaction', by a detailed inspection of tape recordings and transcriptions made from such recordings.

Conversation analysis is an approach to the study of natural conversation, especially with a view to determining the participants' methods of turn-taking, constructing sequences of utterances across turns, identifying and repairing problems, and employing gaze and movement and also how conversation works in different conventional settings.

Even casual conversation is organized by a set of rules, although we probably don't realize it because we pay more attention to the

content of conversation, rather than the specific rules that govern them. We mark the beginning and ends of our turns implicitly. We don't say things like *"Okay, you may now speak"* or *"I asked you a question, please answer it now!"*, which would render our conversations quite inefficient. The signals to end of turn could raise or lower your tone of voice, draw out the final syllable of the last word you spoke, make a pause, or use a "filler" word like *y'know*, *um*.

Turn taking organization

It is an evident fact about conversation is that it takes the form of turn-taking: two or more participants take turns to speak. But how does this happen? How does someone "get the floor"? It may seem that people simply wait for the speaker to stop, and then talk, but the gaps between turns are generally too short for this to be the case.

Turn-construction

Turns can be made up of a single word, a phrase, a clause, or a full-sentence. They are not syntactic or semantic units, but genuinely pragmatic units. According to Sacks (1974) the recognizable potential end of a turn is called in CA a "transition relevance place" (TRP). A TRP may be identified by "a change in the pitch or volume of the voice, the end of a syntactic unit of language, a momentary silence, or some sort of body motion". Transition between speakers usually occurs at such a point, and it is at a TRP that speakers employ the conversational techniques that CA aims to discover.

Turn-allocation

Sacks et al. (1974) suggest a handfull of techniques that assign the rights and responsibilities of the participants in a conversation. In simplified form, these techniques are the following:

1. The current speaker (C) can select the next speaker (N) while still talking, but must then stop talking at the next TRP. (*Current speaker selects next*)
2. If N is not selected, anyone can jump in, and the first to do so gains rights to the floor. (*Self -selection*)
3. If neither (1) nor (2) occurs, C may (but need not) continue talking. (*Speaker continuation*)
4. If (3) happens, rules (1)-(3) apply again at the next TRP.

For example, technique 1 can be employed by pointing, using a name, making eye contact, etc.. Another way the current speaker can select the next speaker is to use the first part of an adjacency pair.

Adjacency Pairs

An adjacency pair is a pair of conversational turns by two different speakers such that the production of the first turn (called a first-pair part) makes a response (a second-pair part) of a particular kind relevant. For example, a question, such as "what's your name?", requires the addressee to provide an answer in the next conversational turn. A failure to give an immediate response is noticeable and accountable. Many actions in conversation are accomplished through adjacency pair sequences, for example: offer-acceptance/rejection,

greeting-greeting,   complaint-excuse/remedy,   and   request-acceptance/denial

Conversational actions tend to occur in pairs. We speak of an "exchange of opinions" and "an exchange of greetings" because many conversational actions call for a particular kind of conversational response in return. Greetings and farewells typically call for another utterance of the *same* type. Other actions call for a *different* type of action: invitations with acceptances (or rejections); congratulations with thanks; offers with acceptances (or refusals).

More formally stated, adjacency pairs are sequences of two utterances that are:

(i)   adjacent
(ii)   produced by different speakers
(iii) ordered as a first part and a second part
(iv)   typed, so that a particular first part requires a particular second; e.g. offers require acceptances or rejections, greetings require greetings, and so on.

Criteria for Recognizing Turns

We have defined a turn as a point in ones talk when another may or does speak. The criteria for recognizing these points in a conversation are: Pauses, In-breath, sentence intonation, Question intonation, and Speaker change. *Pauses* are silences in the conversation. A pause as short as 0.3 seconds is time enough for a person to take a turn in a conversation. This turn may be taken by any party to the conversation. *In-breaths* are points in a conversation when one stops talking to take a breath. *Sentence intonations* are points in a conversation when a speaker's voice marks the end of a sentence or utterance. *Question intonations* are points in the conversation when a speaker's voice marks the end of a question. In-breaths, sentence intonation, and question intonation are points when any party to the conversation may take a turn. *Speaker changes* are points in the conversation when some other party to the conversation does speak.

Objective

- To describe conversation that is taken up by the people who are participating in it.
- To find out how conversational is organized.

Data collection

The data was recorded from the conversation of the participant and the basic transcript with the exploitation of CA transcription conventions. The transcript was numbered according to the sequence of the utterances from number 1 until number 377. The analysis was based on both the recorded conversation and the transcript.

Data Analysis

The analysis is mainly focused on the talk based on the organization of turn taking and adjacency pairs during Math tutorial session. The availability of a taped record enables repeated and detailed

examination of particular events in interaction and hence greatly enhances the range and precision of the observations that can be made.

Result & Discussion

To cover the analysis of some significant and basic structures of a conversation, the researcher prefers to take turn-taking, overlap, repair and adjacency pairs. The recorded encounter is taken as a reliable and documented sample so that the investigator can keep track of mentioned structures and aspects within it. Primarily the transcription of the conversation is granted and then the basic structures and notions are discussed as follow with necessary explanations.

This conversation is categorized to be an interpersonal interaction, although it is performed by the teacher and her student. Most of their utterances are short and often the participant pause their utterances.

Turn Taking

The participant of the conversation is only 2 persons, the tutor and the student. The turn taking organization is only current speaker selects the next speaker with various turn construction units (TCUs).

In excerpt line 1 and 2 teacher's greeting was directly replied by the student with the greeting.

1. T : Hello
2. S : ↑Hello teacher
3.   ah hhh ↑teacher I have ↑math
4.   ↓teacher
5. T : why?

The rising intonation in replying his teacher's greeting indicated his interest to the teacher. To select the next speaker, the student attracted the teacher attention by raising his intonation to call the teacher and the subject he interested in. While the next speaker (the teacher) did not respond yet, the student repeated his utterance in calling the teacher by falling his intonation.

Single word turn

The single word turn occurred in the conversation such as indicated in line 5, 16, 21, and 40 which is using the *wh*-question word *why* and *what*. The use of question word encouraged the next speaker to take a turn at that place. Another form of single word turn is using interjection *ah, yeah, ehm, hah, huuh, heh* appears in line 66,70, 209, 238, 292.

67. T : if there is no line is wrong [so you should write the line
68. S :   [teacher teacher
69.   exam will be next week ↑teacher exam will be next week
70. T : ↓yeah
71. S : ↑ah exam. Monday. Ah

Single Phrase Turn

The single phrase turn occurred in line 42, *last day for what* shown in the following excerpt.

41.   S: tomorrow just last ↑day
42.   T: last day for what
43.   S: for for ↑school (.) just tomorrow is last day

In line 60, the comment *very ↑good ah very ↑good* showed the turn as a response of the previous utterance. The student asked the teacher's comment.

58.   S: teacher this one will be good or no teacher (.)
59.   what do you think? will be good or no?
60.   T: very ↑good ah very ↑good
61.   S: may be (.) may be not

In lines 95 – 98, turn taking process occurred in single phrase turn also.

95.   S: hah [read first read first
96.   T: [ah yeah yeah yeah
97.   S: and then answer
98.   T: okay okay

Another excerpt for the procedure of turn in single phrase is in lines 180 -184 as follows in which the student replied on what the teacher question. In this excerpt, the teacher wanted to know why this one is bonus as the student explained before in line 180.

180. S: (   ) this one is ↑ bonus
181. T: why
182. S: because very confused
183. T: very confusing

Furthermore, single phrase turn also occurred in 185-187, 194-195, 244-245, 248-250.

Single Clause Turn

Single clause turn occurred in lines 5-7 where the teacher asked the student with a single word 'why', then the student answered 'I don't take ESL', but the next turn discussed on different topic.

5.   T: why?
6.   S: I don't take ESL
7.   T: you take your diary

Other single clause turn also happened in lines 47-48, 61-63, 104-106, 151-153, 158-159. The excerpts of the conversation are as follow.

47.   S: How about my picture is car? (.) or just my family
48.   T: it's ↑OK

61.   S: may be (.) may be not
62.   T: that is correct (.)
63.   S: why do you think like that?

104. T: Q X (.) M P
105. S: what is ↑that

106. T :   M Q P X

Turn Allocation and Recognition

Turn allocation and recognition in this conversation are by pauses, sentence intonation, and question intonation. In lines 3-6 below, the student wanted to select the next turn by calling the next speaker, teacher. The rising intonation in calling teacher and math, the student selected the next speaker. Since the teacher did not take the turn yet though the student paused the utterance, so that the student again called the teacher by falling the intonation. By changing the intonation, the teacher took the turn.

3.   S :   ah hhh ↑teacher I have ↑math (.)
4.   ↓teacher
5.   T :   why?
6.   S :   I don't take ESL

For other examples of turn allocation and recognition in form of sentence/utterance intonation are in lines 17-19, 38-42, 48-49, 155-156, 180-181, 216-217. In those utterances, the current speaker selected the next speaker by changing the intonation at the end of the utterances. It can be rising intonation or falling intonation.

Turn recognition in pause occurred in lines 31-32, 52-54, 65-66, 87-89, 113-115, 154-155, 196-199, and 316-317. The speaker used pause to indicate the end of the sentence and to select the next speaker. The use of pause in the end of the utterances, the current speaker was hoping the next speaker will take turn.

Overlapping

In this dialogue, the first overlap happened in Line 11 and 12, when the student, after indicating her interest, tended to claim the floor while the teacher had not finished her account and still tried to hold the floor.

11. T :   that's very [easy
12. S :   [what? teacher

The next overlapping occurs in lines 22, 25-26, 31-32, 82-83, 107-108, 134-135, 156-157, 168 -169. In lines 25-26, the student indicated his curiosity on what the teacher said. The student wanted to hold the floor while the teacher did not finish her utterance.

25. T :   ah no [wrong
26. S :   [yes, Aljohn also shireen [also

While in lines 31-32, the student also took the floor before the teacher finished her account. The student assumed that the teacher finished her utterance by saying this one which actually the teacher repeated the words *this one* showing to emphasize which one should be. At the same time, the student took turn to response on what the teacher said.

31. T :   ah this one [this one (.)

32. S :   [but I'm I'm I finished this one ↑teacher this (.)

In lines 82-83, the overlapping occurred because the student wanted to answer the question on perpendicular. The student assumed that the teacher finished her question stated in line 81, but she repeated her question about perpendicular. At that time, the overlapping occurred.

In lines 168 – 169, when the teacher said *RMNPS perpendicular, MPQS are parallel*, the student uttered at the same time when the teacher uttered *MPQS*. At that time, the student did not assume that the teacher finished her utterance, but the student wanted to express the correct answer following the *MP* as a parallel line. From the excerpt, it can be understood that for first part of her utterance, the teacher explained about perpendicular on RMNPS and continued her utterance *MPQS* as parallel line.

168. T   :   R M N P S perpendicular M P [Q S are parallel
169. S   :   [↑Q S

Adjacency Pairs

In respect of adjacency pairs, because this is just an interpersonal conversation between teacher/tutor and her student, the pattern is question and answer pairs; while sometimes the student asked about the subject and the teacher gave her answer or her explanation. For examples in lines 16-22, 36-43, 47-48, 59-60, 105-106, 116-117, 121-123, 171-176, 185-187.

The following is the conversation excerpt used question and answer pairs.

16. T :   what?
17. S :   math. ha..ha…ha.(laugh)
18. T :   math ↓again
19. S :   yes (.)
20   teacher, this is wrong- so many wrong in there
21. T :   what?
22. S :   this one not wrong? is- is [wrong

59. S :   what do you think? will be good or no?
60. T :   very ↑good-, ah very ↑good

105. S :   what is ↑that
106. T :   M Q P X

185. T   :   (   ) what do you think of (affair) which one is not perpendicular.
186. :   what do you think
187. S   :   parallel (.) or not or included

In addition, aside from the question and answer pairs, there was greeting and greeting pair. The greeting-greeting pair occurred in the first line where at that time, the teacher just came to the student's

house. In lines 1-2, the teacher greeted her student and the student responded her greeting with the rising intonation indicated that he interested in her. He was going to study with her.

1. T :   Hello-
2. S :   ↑Hello teacher

In lines 124-125, the pair firstly was in request, but after pausing her utterance, the teacher repair by herself that what she needed was there. As firstly teacher requested something to the student, then the student said 'protractor' there was an overlapping, when at the same time teacher realized that what she wanted was there.

124. T :   may I borrow your- (.) ah [this one
125. S :   [protractor

Turn taking performed by teacher and student in Math tutorial session commonly in form of question answer using single word turn or single phrase turn. There was also single clause turn but rarely used. Besides, turn taking occurred in greeting-greeting and request-answer. Compared to the question answer pair, both are rarely used.

Turn allocation and recognition were by pause and intonation. The changing of intonation, either rising or falling intonation to select next speaker was often, while to select next speaker by calling her/his name was infrequently used. Since, it was Math tutorial session, pause at the end of utterance was also frequently used. Teacher often explained and said something while doing Math exercises, so that the pause was frequently used.

Overlapping also occurred in the conversation. Overlapping tended to take the turn while the current speaker did not finish her/his account.

Conclusion

As it was a conversation between teacher and student in tutorial, the conversation was commonly in form of question and answer or a statement and response. Pause as turn recognition was frequently used because both participants performed the conversation while doing Math exercise.

The conversation was organized by turn taking and adjacency pairs. Turn taking occurred in which current speaker selected next speaker by calling the name, rising/falling intonation at the end of utterance, pause, and emphasizing a certain utterance/word.

Moreover, because the conversation performed by a Filipino teacher and an Indonesian student who is non-English speaking person and English is his foreign language, it is better to conduct a research on the use of English language included grammar, vocabulary and also the repair process of the conversation. It can be conducted as an analysis of conversation in term of EFL.

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