

# How Do We Talk in Table Cooking?

Rui Sakaida<sup>1</sup>, Fumitoshi Kato<sup>1</sup>, and Masaki Suwa<sup>1</sup>

<sup>1</sup> Keio University, 5322 Endo, Fujisawa-shi, Kanagawa 252-0882 Japan  
{lui, fk, suwa}@sfc.keio.ac.jp

**Abstract.** Cooking and eating on a table is known as a traditional Japanese dining style. As we cook and eat “monja-yaki” on a table, how do we communicate with others? We are interested in situatedness of communication in cooking acts. This paper indicates that cooking acts cause utterances to overlap and generate silence more frequently than when we are not cooking. The order of overlaps in table cooking is shown in two aspects: (1) accidental overlaps are not always repaired in cooking, (2) co-telling of how to cook sometimes allows utterances to overlap. Repeated occurrences of overlaps and silence may make communication in cooking and eating more active and lively.

**Keywords:** Table Talk, Table Cooking, Overlap, Silence, Repair, Co-tellership, Multimodal Analysis, Conversation Analysis

## 1 Introduction

### 1.1 Japanese Table Cooking Style

It is often the case that we participate in conversations with our body engaged in some activities. A table talk is one of the most frequent examples of communication accompanied by bodily motions in our daily life. In a table talk, each participant has to coordinate one’s own utterances and eating acts as well as the others’ utterances and acts [1]. That is why a table talk is a very complicated and intelligent activity.

In Japan, we often cook and eat dishes on a table (not in a kitchen), such as nabe (one-pot meal), yakiniku (grilled meat), okonomi-yaki (Japanese-style pancake with various ingredients), or monja-yaki (Japanese-style pancake thinner and laxer than okonomi-yaki). Cooking and eating on a table is known as a traditional Japanese dining style. In this research, we call a dining style of this sort “table cooking”. The Japanese often say that a table cooking such as nabe enhances social relationships among the participants. However, aspects of a table cooking that contribute to the effect have not been studied yet. In this paper, we investigate situatedness of communication in cooking acts by examining the relationship between overlaps of utterances and silence and cooking acts, and clarify the “order of interactions” brought about by a table cooking.

### 1.2 What to Observe in Table Cooking

In analyzing communication in table cooking, there are unlimited variables to observe, e.g. the kind of dish cooked on the table and cooking tools used that influence the way

and the process of cooking. In cooking nabe, since only one ladle is usually used, more than one participant cannot simultaneously take part in cooking acts. On the other hand, monja-yaki needs to be cooked by several participants, because the process of cooking monja is complicated. While one is pouring the ingredients into a hot plate, another has to hash them up so that they can be cooked well. Monja is more difficult to cook than nabe, and that difficulty encourages participants to teach each other how to cook. The “order of interactions” generated by a table cooking of monja depends on the number of participants and/or the relationships among them. We have observed interactions among participants close to one another in this paper. Those who are not necessarily close to each other would show another order of interactions in table cooking. In this paper, we observe a table cooking of monja-yaki by the three participants close to each other.

## 2 Hypothesis

In Japan, it is often said that a table cooking such as nabe enhances relationships among the participants. What aspects of a table cooking contribute to that effect? We have a hypothesis that a table cooking affects the order of communication on a table.

The first author invited several friends to a restaurant and conducted experiments of cooking monja-yaki. Through several observations, we have made a hypothesis that a table cooking causes overlap of utterances and causes silence to occur more frequently than when we are not cooking. While cooking, we have to engage in both cooking acts and a conversation. Never can we cook without gazing at cooking tools or ingredients of the dishes. Therefore, we look at the others’ faces less frequently than while not cooking.

Generally, in Japanese conversations, a hearer gazed at by the current speaker is likely to be the next speaker [2], and it is indicated that the participants’ gaze exchanges can realize smooth turn-taking. Cooking on a table could hamper smooth turn-taking.

There seems to be another reason, too, for which our utterances tend to overlap in a table cooking. When several participants are engaged in cooking, all the participants do not always have equal amount of knowledge about how to cook. In a multiparty interaction, where more than two participants are involved, two or more advanced participants sometimes tell their knowledge collaboratively to less advanced one(s). This type of tutoring is called “co-tellership”. In co-telling, it is known that two participants frequently co-create one sentence, repairing each other’s utterances, and that is why overlapping utterances are often produced (e.g. [3]).

In spite of many overlapping utterances and silence for a long time, we do not feel that cooking acts disturb conversations. Although turn-taking rules are designed to prevent too many overlaps and too long silence [4], there are likely to be a lot of overlaps and silence in conversations, especially when we are engaged in bodily acts. Overlapping utterances and noises produced during cooking may make us feel that the conversation is active and lively. Near the end of cooking, some participants do not take part in cooking and start watching the process of cooking without saying a word. All the participants focus on the hot plate, and a feeling of “together-ness” seems to be produced.

In this paper, we observe and analyze how often overlaps and silence occur in three cases, e.g. when people choose the dishes from the menu, wait for arrival of dishes, and cook monja-yaki.

### 3 Method

#### 3.1 The Data

The first author (called S) invited two friends (called U and H) to a monja-yaki restaurant in Kanagawa in Japan. We recorded our conversations on the table with two digital video cameras (Figure 1). Three-party conversation is appropriate for observation of a table talk, for conversations by three participants are not likely to be split into more than one group [5]. In order to generate daily life conversations, we did not tell the participants what topics to talk.

A table cooking of monja-yaki is very interesting to observe. In monja-yaki, every participant can take part in cooking. On the other hand, for instance, in cooking nabe (one-pot meal), it is likely that one of the participants monopolizes cooking. That is because only one pair of chopsticks and/or one ladle is often used in cooking nabe, and one of the participants becomes a “chair person” (called “nabe-bugyo” in Japanese) of cooking.



Fig. 1. The capture image of video data.

#### 3.2 Excerption and Annotation

The conversation data was excerpted and divided into three phases: (1) seeing the menu and deciding what to eat, (2) waiting for the dishes to arrive, and (3) cooking monja-yaki. In phase (1) and (3), the participants talked with their bodies engaged in seeing the menu or cooking monja. In phase (2), the participants can focus on talking without any bodily acts, except non-verbal communications, such as gestures or exchanging glances. We compare the phases with bodily acts and the other from a viewpoint of the frequency of overlaps and silences.

Using annotation software ELAN<sup>1</sup>, we made annotations of utterances and cooking acts for each participant. We also composed Japanese transcripts [6] of some suggestive examples. Overlapping utterances are put in [ ] in the transcripts.

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<sup>1</sup> <http://tla.mpi.nl/tools/tla-tools/elan/>

## 4 Overlaps

### 4.1 Quantitative Analysis

In this section, calculating the total hours and the number of times of overlapping utterances about each phase (Table 1), we analyze the frequency of overlaps. Overlaps are the time when more than one participant is talking for 100ms or more<sup>2</sup>.

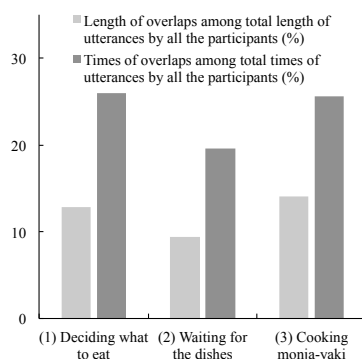
**Table 1.** The length and the times of overlaps in each phase.

(1) Deciding what to eat	S&H	S&U	H&U	S, H&U	Total
Length of overlaps (sec.)	7.73	3.18	7.05	0	17.96
Length of overlaps among total length of utterances by the concerned participants (%)	7.02	3.37	6.34	0.00	12.89
Times of overlaps (time(s))	16	7	17	0	40
Times of overlaps among total times of utterances by the concerned participants (%)	14.16	7.61	15.32	0.00	25.95
Average length of overlaps (sec.)	0.48	0.45	0.41	-	0.45
(2) Waiting for the dishes	S&H	S&U	H&U	S, H&U	Total
Length of overlaps (sec.)	3.11	2.62	4.04	0.33	9.43
Length of overlaps among total length of utterances by the concerned participants (%)	4.63	3.04	6.16	0.00	9.44
Times of overlaps (time(s))	8	9	5	2	20
Times of overlaps among total times of utterances by the concerned participants (%)	12.12	10.84	9.09	0.02	19.61
Average length of overlaps (sec.)	0.39	0.29	0.81	0.16	0.47
(3) Cooking monja-yaki	S&H	S&U	H&U	S, H&U	Total
Length of overlaps (sec.)	5.92	12.42	3.91	0.87	21.38
Length of overlaps among total length of utterances by the concerned participants (%)	6.08	10.28	3.01	0.00	14.08
Times of overlaps (time(s))	13	19	10	3	39
Times of overlaps among total times of utterances by the concerned participants (%)	13.13	16.96	8.55	0.02	25.61
Average length of overlaps (sec.)	0.46	0.65	0.39	0.29	0.55

First, we calculated the length and the times of overlaps among the total length and the times of utterances by all the participants (Figure 2). In phase (1) and (3), the percentages of the length and the times of overlaps are respectively higher than those

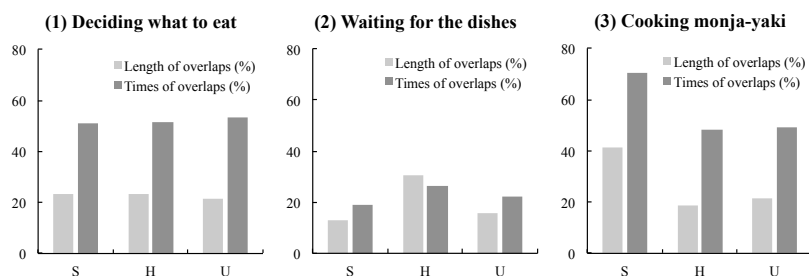
<sup>2</sup> Although overlapping of back-channeling expressions is ruled out as examples of overlapping utterances in general, we call all the overlaps including back-channeling expressions “overlapping utterances” in this paper.

in phase (2). It is possible that the participants were forced to turn their gaze on the menu or the dishes being cooked and they had difficulty in exchanging glances and coordinating their utterances.



**Fig. 2.** The length and the times of overlaps among the total utterances.

Second, the length and the times of overlaps of each participant were calculated (Figure 3). In phase (1), the percentages of the length and the times of all the participants were almost the same. In phase (2), all the percentages (except the length of participant H) were lower than phase (1). In particular, the times of overlaps of S and U are about half as frequent as phase (1). In phase (3), the length and the times of S, and the times of U were especially high. While only the percentage of the length of H was lower than the previous phase, that of her times was as high as in phase (1).



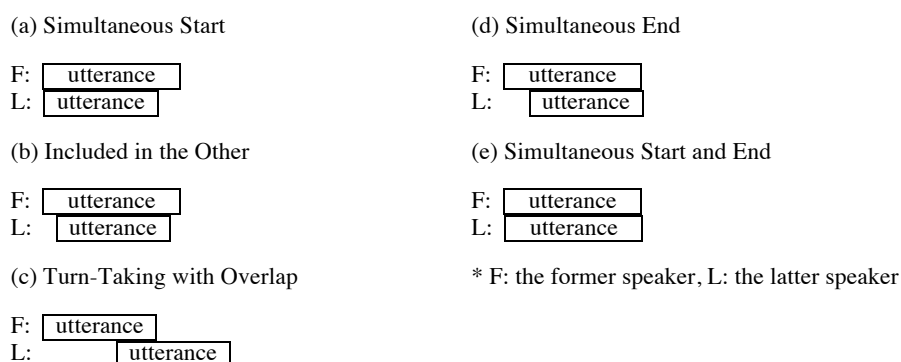
**Fig. 3.** The length and the times of overlaps of each participant.

In general, our hypothesis that overlaps are more frequent during cooking than when not cooking was partly supported. Then, why are overlapping utterances more likely to occur while cooking or looking at a menu? In the following sections, by means of conversation analysis, we will indicate the order of overlaps in a table cooking in two aspects: (1) accidental overlaps are not always properly repaired in cooking, (2) co-telling of how to cook sometimes causes utterances to overlap.

#### 4.2 Accidental Overlaps and Insufficient Repair

Although the frequencies and lengths of overlapping utterances in phase (1) and (3) were somewhat similar, the qualitative features of the overlaps were different between the two phases.

Overlapping utterances can be classified into five types (Figure 4), from a viewpoint of when the latter utterance starts and stops overlapping with the former<sup>3</sup>: (a) Simultaneous Start (two utterances are started simultaneously, and either of them is completed before the other), (b) Included in the Other (the latter is started after the former is started, and the latter is completed before the former is completed), (c) Turn-Taking with Overlap (the latter is started after the former is started, and the former is completed before the latter is completed), (d) Simultaneous End (the latter is started after the former is started, and the two utterances are completed simultaneously), (e) Simultaneous Start and End (two utterances are started and completed simultaneously) (modified after [7]).



**Fig. 4.** The five types of overlapping utterances.

Among the five types, type (a) and (e) has a different feature from the others. In general, when a hearer starts to overlap with the speaker's utterance, the latter speaker, more or less, intends or expects to make his/her own utterance overlap with the former's utterance. Therefore, the latter utterance never starts before the former starts. However, as for type (a) and (e), two utterances "accidentally" overlap, for neither of the two speakers can anticipate the beginning of the other's utterance. When two participants start to speak at the same time, one of them or both of them may not be heard or understood completely. In such cases, the speaker him/herself or the others should start to "repair" the insufficiently understood utterances [8].

Nevertheless, in table cooking, it may not be frequent that accidental overlap of utterances (type (a) or (e)) is repaired either by the participant who made the trouble or by the other participant(s). In fact, in our experiments of conversations with monja, all the accidentally overlapped utterances were not repaired. Of all the overlaps, 3 examples in phase (1) and 4 examples in phase (3) were type (a). There were no examples of type (e) in phase (1) and (3). While all the examples of (a) in phase (1) were properly repaired, some in phase (3) were not repaired, which is likely to be one of the interesting aspects of interactions in table cooking.

<sup>3</sup> In this paper, "simultaneously" means that the latter utterance is started less than 100ms after the former utterance is started, and "One utterance is started after (completed before) the other" means that one utterance is started (completed) 100ms or more after (before) the other.

In the transcript of phase (1)-1 (Figure 5), when an example of type (a) appears, self-repair is smoothly accomplished (overlapping utterances are put in [ ] in the transcripts). Answering the question “Imi wakarimasu? (Do you understand?)” by 02H, 03U and 04S started to speak simultaneously. Judging from her eyes on S and the polite expression “wakarimasu”, 02H seems to have been directed to S<sup>4</sup>. However, soon after 02H, 03U and 04S began to ask questions, in order to clarify 02H’s question. 03U was “E, dou iu koto? (Well, what does it mean?)” and 04S was “Nan no chigai? (Difference of what?)” These two utterances overlapped accidentally, and their utterances may not have been properly heard by H. 400ms after 03U, 05U tried to repair the trouble for herself, saying “Aji no chigai tte kanji? (Is it the difference of the taste?)” Since the expression of 03U was more abstract than 04S, 05U may have combined her previous question with more specific question of 04S’s. 05U, which is a closed question, seems to be easier for H to answer than 03U and 04S, which are open questions. Realizing it was necessary to repair incomprehensibility due to the overlap of utterances, 05U succeeded in repairing for herself.

- 01 H: 私もん(.)もんじゃにしちやうと(0.4)もんじゃの違いが分からないんです=  
When I, I try to have monja, I don't recognize the difference of monjas.
- 02 H: =よね(.)意味わ(h)か(h)りますか?((turning her eyes on participant S))=  
Do you understand?
- 03 U: =[え: どういうこと]::?(0.4)  
Well, what does it mean?
- 04 S: =[何の 違 い?]  
Difference of what?
- 05 U: 味の[違いって感じ?]  
Is it the difference of the taste?
- 06 H: [全部もんじゃ]ってもんじゃ(.)になる  
All monjas will be monjas.

**Fig. 5.** Transcript of phase (1)-1.

On the other hand, in the transcript of phase (3)-1 (Figure 6), the trouble caused by the overlap was left without repair by any participants. The trouble was due to overlapping utterances of type (a). In this transcript, the participants were engaged in turning their eyes on the monja-yaki cooked on the hot plate. Caused to look at the monja, the participants do not seem to have focused on smooth turn-taking, exchanging glances with each other. First, all the participants were looking at the monja ((1) in Figure 7). 01U addressed S and asked a question to him, “Monja tte Kansai? Kanto? (Are monjas from Kansai? Or Kanto?)” At the same time as 01U started to ask the question, U turned her eyes on S ((2) in Figure 7), and immediately, S also turned his eyes on U ((3) in Figure 7). U seems to have looked at S in order to have S answer her question, and S was preparing to answer it, with his eyes on U. S, however, turned his eyes on the monja again, before 01U completed the question ((2) in Figure 7). 02S answered 01U, saying “Kanto dayo. (It is from the Kanto.)” While 02S was answering it, S’s eyes remained on the monja. As soon as 02S was completed, U also turned her eyes on the monja ((1) in Figure 7). 0.6ms after 03U responded to 02S, 04S and 05H started to speak simultaneously. 04S was an additional answer to 01U, “Kansai nai (There are not any monjas in Kansai)” and 05H was to tell new information about the birthplace of monja, “Tsukishima? (Are monjas from Tsukishima<sup>5</sup>?)”. This was an accidental overlap, but no one answered 05H or

<sup>4</sup> Participant S is one year older than H and U, and H usually uses polite expressions to S, not to U. Though U is also younger than S, U does not use polite expressions to S so often.

<sup>5</sup> Tsukishima is the place in Tokyo (in the Kanto region), which is said to be the birthplace of monja-yaki.

repaired the trouble. 04S was speaking while 05H was speaking, so S may not have heard 05H clearly and answered her. On the other hand, U seems to have noticed H saying something. Just after 05H started to speak, U looked at H in a moment (less than 300ms) ((4) in Figure 7). Nevertheless, U neither answered 05H nor asked H to repeat the utterance. 04S and 05H were looking at the monja while they were speaking. Hearing 04S and 05H, U turned her eyes on H, S, and finally the monja in a short time. It is possible that U's interest in the birthplace of monjas was diminished on account of S and H concentrating on cooking, and gave up talking about it with S and H. This kind of closure of topics may be typical of interaction in table cooking.

- 01 U: 瑠衣さんは(.)え(.)もんじゃって関西?(.)関東?(.)  
 Rui\*, well, are monjas from the Kansai ((region))? Or the Kanto ((region))?  
 Gaze : (1 ) (2 ) (3 ) (2 )
- 02 S: 関東[だよ]  
 ((It is from)) the Kanto.  
 03 U: [ あ: ]: (0.6)  
 Oh.  
 Gaze : (2 ) (1 )
- 04 S: [[関西な]い  
 ((There are)) not ((any monjas)) in Kansai.  
 05 H: [[月島? ]  
 ((Is it from)) Tsukishima?  
 Gaze : (1) (4) (2 ) (1)

\* Rui is participant S.

Fig. 6. Transcript of phase (3)-1.

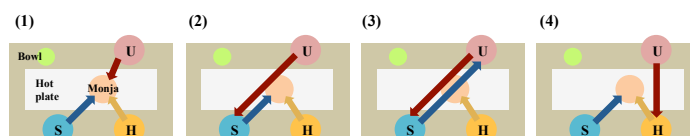


Fig. 7. Gaze direction (all the participants) in the transcript of phase (3)-1.

In phase (3), a little different interaction of overlaps of type (a) was also observed. In the transcript of phase (3)-2 (Figure 8), two overlapping troubles were not repaired. One of the troubles is due to overlapping utterances of type (a). In this transcript, the participants were about to start cooking monja-yaki, confirming and deciding how they should cook it. First, 01H and 02H, not so skilled, asked a question about what to do first in cooking monja, “Gusha tte yarun deshitakke? (Are they to be in a muddle?)” 03S, a little more skilled, answered 02H, saying “Soussuyo. (That’s right.)” While 03S agreed to 02H’s remark, 04U doubted whether 02H was really correct, and raised a question, “Gusha tte yarun dakke? (To be in a muddle?)” 600ms after, 04U continued to tell her opinions, by telling her recent experience of eating monja, “Are dayone, konaida tsukuttano (Say, the other day I made...)” However, right after 04U began to tell the story, 05S started to tell the information about how to cook monja, without hesitating to overlap with 04U. As 05S did not seem to stop speaking, 04U gave up telling her experience. 07U started to help 06S to tell what to



do for the present<sup>6</sup>, and the two utterances were partly overlapped. The latter part of 07U, 08S and 09H started to speak simultaneously and were also overlapped. 07U and 08S were trying to negotiate what to do at the present, 07U saying “Dasun dayone. (We have to put them on the hot plate.)” and 08S saying “Sore wo nokoshite dasu... (Leave it and put them...)” Just after the utterance, 08S found that the hot plate had not been oiled yet and said “A chotto matta. (Oh, wait a moment.)” At the same time, 09H was trying to suggest to S that H should participate in cooking instead of S. However, because of the trouble of oil, 09H was not heard properly and all the participants were forced to begin solving the trouble (10S, 11U, 12H and 13S). As a result, the suggestion by 09H was not shared with the others, and no one tried to repair the trouble of 09H.

- 01 H: もんじやって先具材載せ(0.2)なんか(0.4)  
In ((cooking)) monja, first, the ingredients are put...well...
- 02 H: ぐしゃってやるんでしたっ[け]  
((Are they)) to be in a muddle?
- 03 S: [そう]っすよ(.)  
That's right.
- 04 U: ぐしゃってやるんだっけ(0.6)あ[れだよね(.)こないだ作ったの]  
To be in a muddle? Say, the other day I made...
- 05 S: [あの::(. )下に::汁]があるんで:  
Well, the paste is below the ingredients,
- 06 S: (0.6)それを[残し]  
so leave it ((in the bowl))...
- 07 U: [とりあえず](0.6)[[出すんだよね]  
For the present, ((we)) have to put ((them on the hot plate)).
- 08 S: [[それを残して出]すあちょっと待った](.)  
Leave it and put ((them)), oh, wait a moment.
- 09 H: [[°あすみません(. )や(. )やる°]  
Oh, sorry, d, ((I)) will do ((it)).
- 10 S: あれが要る(. )  
((We)) need that.
- 11 U: あ:[油だ]  
Ah, oil.
- 12 H: [油[油油(. )あぶ]  
Oil, oil, oil, oi...
- 13 S: [油を(. )油が]  
Oil, oil...

**Fig. 8.** Transcript of phase (3)-2.

In phase (3), among all the overlaps of type (a) (4 examples), 2 examples were not properly repaired by anyone. On the other hand, in phase (1), all the 3 examples were adequately repaired (all of them were self-repaired). While table cooking, if two participants start to speak simultaneously, the trouble of overlapping may not always be repaired properly. That may be because dealing with cooking acts is regarded as prior than coordinating all the utterances.

<sup>6</sup> At this point, the utterances of 06S, 07U and 08S are overlapped and this overlapping is regarded as co-telling of how to cook. As for “co-tellership” in table cooking, we will mention in detail in the next section.

### 4.3 Overlaps Accompanied with Co-telling

Another reason why overlaps occur more frequently while cooking may be that more skilled participants tell how to cook monja-yaki to the less skilled. While cooking, the participants taught how to cook to each other several times. In this section, we show a case that two more skilled participants (S and U) told how to cook to the other (H), and then the utterances of the former two overlapped. This type of tutoring is called “co-tellership”. In a three-party conversation, when two speakers co-tell something to the third person, their utterances seem to overlap frequently [3].

In the transcript of phase (3)-3 (Figure 9), S and U co-told H how to cook monja. First, U (the most skilled) found that it was time to make a “dote” (a bank) and pour the ingredients, and reached her hand to the bowl of the ingredients. Seeing a series of her cooking acts ((1) and (2) in Figure 10), S (intermediately skilled) tried to tell H (not so skilled) to make a “dote”. However, 01S was not able to vocalize the word “dote” quickly. He started a ‘word search (e.g. [9])’, trying to express it with a gesture and saying “Kore anoo... (This, say...)” Then, 02U moved her gaze from the bowl to the monja ((3) in Figure 10), and said “Dote tsukutte. (Please make a “dote”.)” This utterance of 02U was meant to be a collaborative instruction to H. As a result of this turn-taking, the two utterances overlapped by 1500ms. In the situation that the more skilled had to tell H how to go on cooking as soon as possible, S and U realized “co-tellership”. That is why their utterances were allowed to overlap here and not repaired by anyone.

01 S:                   これ(.) [あの:::(.) 土手を作ら]ないと。  
                           This, say... ((you)) have to make a “dote”\*.  
 02 U:                   [土手作って(丸作って)]  
                           Please make a “dote”\*, (make a circle).  
 Gaze : (1 ) (2 ) (1 ) (3 ) (4 ) (3 ) (5 ) (5 )  
 \* A “dote” means a bank in Japanese.

Fig. 9. Transcript of phase (3)-3.

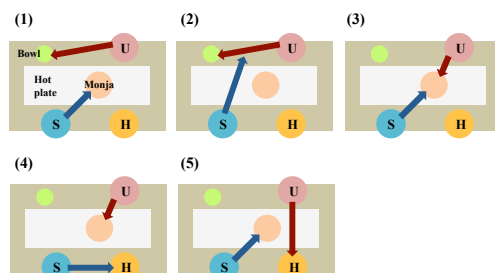


Fig. 10. Gaze direction (S and U) in the transcript of phase (3)-3.

In phase (3), among all the overlapping utterances (39 examples), 4 examples were regarded as co-tellership. On the other hand, in phase (1), there were no examples of co-telling. This result indicates that, in a three-party table cooking of monja-yaki, which is difficult to cook, overlapping while cooking may be partly responsible for two more skilled participants’ co-telling about how to cook.

In fact, as was mentioned in 4.1 (Table 1), in phase (3), the length and the times of overlaps between S and U, who are more skilled than H, was much larger than those of the other combinations. In phase (1) and (2), on the contrary, the overlaps between S and U were not so frequent, compared to the other combinations (though the times of overlaps between them in phase (2) were more than the others). Further analysis is

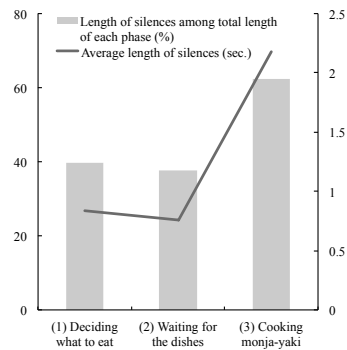
needed that investigates how many examples of overlaps by S and U were resulted from collaborative instructions.

## 5 Silence

In this section, we analyze the frequency of silence in the three phases. We define “silence” as the time when none talk for 100ms or more. The total length of silence in each phase (Table 2), the percentages of silence among total length of each phase (Figure 11), and the average length of the silence in each phase (Figure 11) were calculated.

**Table 2.** The total length of silences in each phase.

	(1) Deciding what to eat	(2) Waiting for the dishes	(3) Cooking monja-yaki
Total length of silence (sec.)	93.33	59.91	256.9
Length of silence among total length of each phase (%)	39.74	37.72	62.21



**Fig. 11.** The total length and the average length of silences.

In phase (3), the percentage of silence was higher than in the other phases. Similarly, the average seconds of silence in phase (3) was longer than in the other phases. It is indicated that silence occurs more often while cooking monja-yaki than when not cooking.

Although in both phase (1) and (3) the participants talked with their bodies engaged in some acts, silence in (1) was as often as in phase (2). In phase (1), the participants had to look through the menu, talk about and decide what to eat in a short time. It is possible that silence for a long time was not allowed because of the urgent task of decision-making.

On the other hand, silence in phase (3) occurred more frequently than the other phases. Our hypothesis that cooking acts make us silent was roughly supported. Even when long time silence occurred in cooking, we were not necessarily embarrassed or unpleasant. The process of cooking monjas is complicated and they need to be cooked by more than one participant. By cooking together, some kinds of trustful relationships may have been produced. The conversation was by the participants close to each other, and if participants not so friendly talk in a table cooking, another result may be indicated.

## 6 Conclusion

In this paper, we analyzed how a table cooking influences the order of conversation. We indicated that cooking acts cause overlaps of utterances and generate silence more frequently than when not cooking. By means of conversation analysis, we analyzed the order of overlaps in two aspects: (1) accidental overlaps are not always repaired in cooking, (2) co-telling of how to cook sometimes allows utterances to overlap. Overlaps and silence may generate a situation of more active and lively conversation.

Our experiment has presented evidence that communication in a table cooking is situated in cooking acts. We conjecture that bodily motions irrelevant to the contents of a conversation generate an order of communication different from a normal conversation; we are not necessarily supposed to exchange glances with each other, which would be a “social rule” in normal conversations, because of the obligation to engage in cooking acts. In addition, since monjas are not so easy to cook and need to be cooked by more than one participant, we cannot help instructing each other or confirming how we should cook, instead of the most skilled one monopolizing cooking. In a three-party table cooking of monja, each participant making a commitment to cooking acts, there seems to be a kind of interactions in which a goal is achieved by all the participants.

We will continue the study of multiparty interactions in table cooking and accumulate fundamental knowledge for designing dining table environment.

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