: Ethnomethodological study of emergency calls

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Abstruct

In the first part (part I), we are going to illustrate what procedures sustain "proper emergency calls" inside and outside of the telephone emergency calls (119-talks). For that purpose, we analyzed the medical and fire emergency calls and their settings. The data were audio and videotaped at two dispatch centers in Japan from 1994 to 1995.

First of all, following the studies by Don H. Zimmerman, we paid our attention to the inside of the talks. We found three features: (1) At the opening of the talk, the dispatcher asked the caller about the category of the emergency, (2) Both participants (caller and receiver) wanted to confirm the appropriateness (relevancy) of the emergency call, and (3) At the closing, almost every dispatcher said that a emergency vehicle was now leaving or had left already.

Secondly, we investigated the video-data by referring to the studies by Jack Whalen. We found four important issues, which were useful for cooperative work within dispatch centers: (1) Dispatchers used item-

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line-up formats, (2) Dispatchers used some rather primitive communication tools, for example paper memo and white board. (3) Dispatchers were surrounded by well-integrated space-sound environments, and (4) Dispatchers take some particular body arrangements, including postures, to realize more collaborative works in the centers.

By taking such procedures mentioned above, they accomplish and manage the emergency calls, and we may understand it is these procedures that construct the institutional settings of emergency dispatch centers.

In part II, we will examine institutional settings regarding the relationship between the (talk-in-) interaction and the institutions. Analyses of interaction are sometimes criticized that it is insufficient for treating institutions. However, we will note that the critics presuppose the interaction such a narrow way that it is limited at the micro-level. We would like to suggest so to speak the radicality of the interaction.

First, we review the discussions in EM and CA regarding talk and institutional settings or the organization of work in order to examine this issue.

Secondly, we consider another side of the problem that the concrete interactions which are observed in institutional settings do not accord easily with the nature of institutions which investigators suppose.

After these examination, we investigate how the rules are followed or used by member as a part of skills informing their institutional feature.

(Y. KASHIDA & K. KITA)

Part I: How the emergency calls are accomplished Through/within institutional settings?

1. Research Design

In this part, we (kashida) will illustrate what procedures sustain "proper emergency calls" inside and outside of the telephone calls. For that purpose, we will analyze the medical and fire emergency calls and the settings where they were collected.

The data were audio and video taped at two dispatch centers in Japan, which are called X and Y hereafter. The data of X dispatch center will be analyzed in chapter 2 and the other date will be dealt with in chapter 3.

It is as follows of the outline of the data. Concerning X dispatch center, we obtained 360-minute audio tape data, and, the participant observation was carried out in 1994 and 1995. X dispatch center receives almost 15 emergency calls a day, and the center covers about 150,000 people of the residence.

Concerning Y dispatch center, we video-taped the cooperative work in the room for 24 hours without interruption (in total 67 video tapes were recorded). Some interviews and participant observations were made afterwards. Y dispatch center receives about 50 calls a day, and the center covers about 300,000 people of the residence.

2. Inside of the telephone calls

(1) Category Identification at the opening of the talk

Here, I'd like to analyze the voice data based on how their opening sequence is progressed. At the very opening sequence, almost every dispatchers employs following statement to clarify what the caller needs.

[CASE 1] (x: 1-28) Case where "Fire" and "ambulance" categories are made priority

D: dispatcher

C: caller

1 D: shoubou desu. kaji desu ka? kyuukyuu desu ka?

(This is fire fighting headquarters. fire? or ambulance?)

2 C: e:::, kyuukyuu desu ga (U:::, ambulance)

3 D: kyuukyuu. basyo dochira desuka (ambulance. Which is it the place?)

4 C: ○○ si. ○○ ga oka. 〔地名〕 (○○ City ○○ hills. [name of the place] (the rest is omitted)

"This is fire fighting headquarters. fire? or ambulance?" This opening clearly shows that the dispatcher firstly tries to identify the category of the call. He has to choose one category from among many categories such as "fire", "ambulance:nomal car", "ambulance: high standard car", "hospital introduction", "miscalled telephone" etc.

Above all, to quickly dispatch a fire-fighting team to the place is the most important in their business. Therefore, this kind of opening question is ordinarily used in such fire-fighting headquarters. Likewise the opening question of the receiver helps eliminate other unnecessary choices and highlight the caller's need, and "fire" was marked as the highest priority in the $\{CASE1\}$.

(2) Orientation to Appropriateness (ex. extend of damage etc.)

Category identification in the talk is accomplished through/within several steps. The receiver has to identify the emergency call from among various possibilities, such as "the request of fire fighting car", "ambulance request" and "hospital introduction request."

In the middle of the talk, there might be the process of "Confirmation of appropriateness". This confirmation process is performed by both of the Caller and the Dispatcher. The following excerpts will illustrate the process.

First of all, there is a confirmation of appropriateness from the dispatcher side. we want you to see the eighth line of [CASE 2] (underlined part).

[CASE 2] (x:1-21) car accident case

- 1 D: 119 bann, syoubou desu. kaji desu ka? kyuukyuu desu ka? (119 call. This is fire fighting headquarters. fire? or ambulance?).
- 2 C: moshi moshi, jiko nann desu kedo. (Hello, it is an accident)
- 3 D: koutuu-jiko desu ka
 (Is it a traffic accident?)
- 4 C: e::, hai (umm:, yes)
- 5 D: basyo dochira desu kane (Which is it the place?)
- 6 C: OOO hoomu sennta: no chusha jyou de

 (At the parking lot of the OOO home center)

 (an elision)
- 7 C: tyotto butuke te simattann desu kedo(I had a little bump)
- 8 D: kega sarete iru kata irunn desu ka? (Are there any injured persons?)
- 9 C: inainn desu kedo. chotto kuruma hekonnjyatte (No, but my car has a dent.)

10D: sore jyaa: ano: keisatu sann nanndesu ga. (Then, you should better call to the police)

11C: ha? (what?)

12D: keisatu sann no houga yorosii kato omounn desuga. (I think that the police office is better.)

13D: kegasita hitoga inekereba kotirani toiawasetemo (I do not know what answer to make, if there is no injured person.)

(the rest is omitted)

The caller succeeded in maintaining the appropriateness of the call up to Line 7, however, when the dispatcher asked "Are there any injured persons?" in Line 8, what the caller could do was to answer "No." To ask if there are any injured persons is the custom procedure that the dispatcher employs to distinguish whether the call is "appropriate" or not.

The second type of the confirmation process is made by the caller itself. we want you to see the 8th line of [CASE 3] (underlined part).

[CASE 3] (X:6-11) granny's condition is bad

1 D: hai syoubou desu. kaji desu ka? kyuukyuu desu ka? (This is fire fighting headquarters. fire? or ambulance?)

2 C: attu moshi moshi (hello, hello)

3 D: hai (Yes)

4 C: ano kyuukyuu sya desu ka (Is it an ambulance car?)

5 D: e syoubou syo desu (Well, this is a firehouse.)

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6 C: a suimasenn ano:: RRR ano BBB (husband's name) nanndesu
      kedomo
     (ah excuse me, uu, this is RRR BBB (husband's name))
7 D: hai
     (and)
8 C: chotto nanika ano :: oba : chann guai ga waruinn de
      (So well, something that, our granny is a little sick.)
9 D: ee
     (ves)
10C: sugu kite itadakitainn desu kedo
      (Please, I would like you to come soon)
11D: kvuukvuu sva desu ne
     (Do you want an ambulance car?)
12C: ee
     (ves)
13D: bannchi wa doko desu ka
      (What is your house number?)
(the rest is omitted)
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In Line8, although there is no prior inquiry about the caller's situation from the receiver's side, Grandmother's condition is spontaneously shown by the caller.

In usual emergency calls, it is a dispatchers who confirm the caller's situation by using some interrogations, however, the ordinary "interrogation part" is skipped in this case. However, this spontaneous explanation helps to display how the situation is. Therefore, considering the privious case2, we may say that "To talk about the condition" is the standardized expectation of both "receiver" and "caller".

(3) Announcing the dispatch of emergency vehicles

Almost all emergency calls are finished by announcing the dispatch of emergency vehicles. So, in the closing sequence, most of the dispatchers announce that an emergency vehicle is on the way.

[CASE 4] and [CASE 5] are typical transcripts in the closing part of the talk.

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[CASE 4] (X:5-29) secondary request of fire truck for a forest fire
 1 D: shoubou desu
       (This is fire fighting headquarters.)
 2 C: shoubousho wa dou shitann dayo koneide
       (What is the fire station doing? None has arrived yet.)
 3 D: ima, mukatte imasu. syoubou sya wa
       (Now, a fire truck is on the way.)
                     (
 4 C:
                     unn to nii
                     (Really)
 (the rest is omitted)
[CASE 5] [X:4-14] woman is falling down somewhere
       (previous part is omitted)
 1 C: kinnkyuu de onegai shitainn desu keredomo
       (I want to ask in emergency, please.)
 2 D:
                                    e:: to kono kata jyosei desu ka
                                    (well, lady or gentleman?)
 3 C: jyosei desu
       (It is a woman.)
 4 D: jyosei ne
       (Woman)
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In this chapter, we have paid our attention to the inside of the talks. we have found three features in it: (1) At the opening of the talk, the dispatcher asks a caller what kind of emergency it is, and "fire? or ambulance?" is the typical opening question for identifying its priority, (2) Both participants (caller and receiver) want to confirm the appropriateness (relevancy) of the emergency call and "are there any injured person?" is the typical question for confirming the appropriateness of the call, and (3) At the closing, almost every dispatcher says that an emergency vehicle is now leaving or has left already, which means that an emergency call cannot be finished till certain rescue actions have done.

3. Outside of the telephone calls

Next, I'd like to analyze the video recording data.

(1) Filling in form

Dispatchers questioned according to the format, as (Whalen, 1995) described. The blue A4 size paper used in the dispatch room contains following 19 questions:

- (1) Place
- ② Name
- 3 Types of Emergency
- (4) Landmark

- (5) Conditions
- (6) Caller's Name and Sex
- (7) Caller's Phone Number
- (8) Time of Notification
- Notification Means
- ① General Category of Emergency
- (11) Cause
- ② Age of the patient
- The Sex and the Number of Patients
- (4) Consciousness Level
- (15) Respiration
- (16) Pulse
- (17) Blood Pressure
- Body Temperature
- ① Injured Parts

Of course, some issues in this format remained untouched, however, the following transcript may illustrate that the format of this filling form is used as a frame.

[CASE 6] $(Y:(16) 18:52 PM\sim19:05 PM)$

at 18:53' 23"

(previous part is omitted).

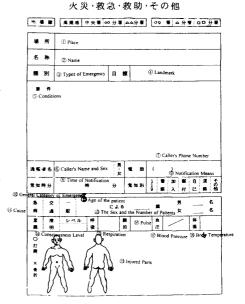
1 D: hai otaku ee:: dennwa banngou sumima senn

(Okay, your, uh, your telephone number, please.)

2 C: 456 no

(456)

3D: hai



Fire · Ambulance · Rescue · Others

(yes)

4 C: ((789 no 123)) (((789 123)))

5 D: hai otakusama <u>onamae suimasenn</u> (alright, your name, please)

6 C: ((XXXdesu)) (XXX)

7 D: XXXsann (Mrs XXX)

8 C: haii (ves)

9 D: wakari mashi ta sugu iki masu
(all right, we will reach you soon)
(the rest is omitted)

The dispatcher's utterance, "sumimasenn (Please)" can be understood as the display of "unnaturality". At a glance, the topic of the talk from Lines1 to 4 seems to have little linkage with the one from Lines 5 to 8, if they appear in casual daily interactions. However, the two topics are recognized "natural" in this interaction, maybe thanks to the need to fill the necessary issues of the form, and to the presumption of the callers that they should inform their personal informations in such an emergent occasion. The utterance "sumimasenn (Please)", therefore, works not only to mark the topic change but also to display the interaction is carried out according to an "unnatural" frame to fill the form.

(2) Paper memos and white board: The use of primitive communication tools

The paper memos, the removable tags, and white board were used in both dispatch centers. In case a residence plans to have a bonfire and to

make a smoke, for example, s/he sometimes informs the planned smoke of the dispatch center beforehand. The informations of such planned smoke are written on the memos to avoid possible confusion (see [photograph 1]).

As for the use of the white board, necessary items were listed for a fire accident (see [photograph 2]).

Why do they still use such primitive communication tools?

One of the reasons is that the low-tech tools realize the cooperative working spaces among the dispatchers, in which they can easily share some informations by peeping the memos over their co-workers' shoulder.

Likewise, the use of primitive communication tools makes it easier for the dispatchers to share some necessary information (see Hutchins, 1990), and to realize the cooperative working space among them.



[photograph 1 : paper memo (left, clipped by magnet) and white board (right)]



[white board's items]

- ①age
- 2occupation
- 3 purpose
- 4total area of the building
- ⑤burned area
- 6the extent of damage

[photograph 2: white board]



[photograph 3: front panel and body arrangement]

(3) Sound and space environment

Dispatchers were surrounded by well-integrated sound-space environment.

In Y dispatch center, two groups are composed of six members individually, and they take turns with each other every 24 hours. Every morning at the beginning of their work, each new group tested the

telephone lines, including public 119 lines and hotlines with police and highway headquarters etc.

As the result of this regular check-up, "No ringing" means "no call" from citizens.

On the front panel of the dispatch center, the working condition of the emergency vehicles is displayed: that is the panel shows the information of the state of the emergency cars, for example "stand by", "on the spot", "arriving at the hospital", "under repairing". By using this display board, a group can hand over their work to the other group very easily.

When the state of the vehicles is changed, this front panel makes flapping sounds and let the dispatchers realize the change. This enables them to allocate the vehicles appropriately according to the latest information (see [photograph 3]).

Consequently, an emergency center is well-integrated in their soundspace environment.

(4) Body arrangements and postures

Usually, there are two dispatchers in the room and they sit side by side. The left table is the main table and the right one is the sub table.

The dispatcher in the main table receives the calls. The one in the sub-table quickly monitors the voice and assists the main dispatcher, for example by checking the adress of the caller. While the sub dispatcher is assisting the main, the main dispatcher sometimes changes his posture to monitor the work of the sub-dispatcher. Consequently, mutual monitoring is accomplished in their work (see [photograph 3] again).

In this chapter, there were four points: (1) Dispatchers used itemline-up formats, (2) Dispatchers used some rather primitive communication tools, for example paper memos and white board. (3) Dispatchers were surrounded by well-integrated sound-space environments, and (4)

Dispatchers take some particular body arrangements, including postures, to realize more collaborative works in the centers.

we may understand It is these procedures that construct the institutional settings of emergency dispatch centers.

4. Conclusion

This study was conducted to explore and illustrate what procedures accomplished the "emergency calls" at the two fire-fighting dispatch centers.

Y dispatch center has already been equipped with more advanced communication dispatch system; only by touching the display, you can input the exact address to the computer and the address is transferred to the next one, then the precise map to the address is displayed on its screen. However, even though the labor-saving system has been introduced in Y dispatch center, the joint works at the other X dispatch center were found almost same as in the Y center; that is, while in the X dispatch center, a sub-dispatcher assisted the address identification by looking it up in the map published by Zenrin Co., in the Y dispatch center a sub-dispatcher moved to the main seat and helped the identification by operating the touch panel.

As seen in the two dispatch centers, even though an advanced communication system is introduced, they still preserve the customary joint procedures they've established in managing the emergency calls.

The data gathered at the dispatch centers may imply that several information resources concerning space-sound environments (include body arrengements) are well integrated to the emergency management systems and may facilitate the dispatchers' information management.

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Part II: Institutions/organizations and ethnomethodological studies of work

In this part, we will argue the issue why or how we claim the previous analyses in part I treats a institution/organization. In other words, we intend to locate our analyses in the discussions concerning the relationship between the (talk-in-) interaction and the institutions inside and outside of ethnomethodology (EM) and conversation analysis (CA). In addition, we want to defend our analyses from the expectable objection such that it would be insufficient and inappropriate to analyze the talk-ininteraction or interaction for treating institution, or, on the contrary, the analyses are not consistent because they secretly carry the institutional elements which should be outside interaction. We could note, however, that both of these criticisms presuppose the interaction in such a narrow way that it is limited at the micro-level and separated from something (e. g. institution) at the macro-level. And this way of viewing the interaction is an effect of an operation which seeks to search for a hidden deeper structure. Rather, the interaction itself could be thought to already acquire the feature to access the institution. We would like to suggest so to speak the radicality of the interaction (though it would not be appropriate to even call it "interaction" in this case).

In the following, we review the discussions in EM and CA regarding talk and institutional settings or the organization of work. In there, we could recognize roughly three points of view. First, the viewpoint which seeks to explain the feature of talk from a character of the institution or the social structure. Second, the idea that any characteristics of institutions, if there are such characteristics, should be explained from the feature talk-in-interaction. And the analysis of talk itself has priority in it. Third, the viewpoint which focuses on the self-contained and self-explicating property of the interaction, and which seeks to describe

institutions as the organization of such interaction or "work". It refuses both to think that analyses of the interaction should be supplemented by studies of the institution, and to treat the talk-as-such as if it is a kind of foundation of all activities.

We agree to the third viewpoint, which instructs us from a different way of treating the institution from the first and the second one, and which is according with our analyses if they succeeded. Some investigators in the third group remark the importance of E. Bittner's paper as a leading pioneer of their studies. We also examine this paper to suggest the possibility of the third viewpoint for sociological studies on the institution. But at first, let us examine these three points of view more precisely.

Institutional settings and the viewpoints of ethnomethodology and conversation analysis

In the context of ethnomethodology and conversation analysis, as G. Psathas puts it, there are discussions of different viewpoints "with regard to the study of talk-in-interaction as that talk is found in particular settings known and referring as 'work settings', 'organizations', 'institutions', and the like" (Psathas 1995 p. 139). According to him, the discussions are along two lines. The first is concerning linkage conversation or talk-in-interaction with social structure. The second line is asking from the stand point of "ethnomethodological studies of work", whether the organization of work should be studied adequately by the position of CA.

(1) Similar discussion outside of ethnomethodology

But before reviewing these discussions, we note there are similar discussions (or even criticism to EM) along the first line outside of EM and CA. The discussions seem to occur almost because EM and CA are

supposed to treat only the interaction at the micro-level. EM and CA have been sometimes criticized because they seem to ignore the effect of institutions and the like which are supposed to be at the macro-level (Broudieu 1987). And the critics claim that the social phenomena should be explained taking into account such macro-structures or even (usually) invisible power relations (Giddens 1977), or that phenomena which EM treats need to be generalized from, for example, the Parsonian formal analytic point of view. Certainly EM and CA are also estimated, but under the condition they provide detailed analyses of such interaction which are to be linked with macro sociology.

Though many ethnomethodologist refuses such interpretations of EM and CA as misunderstandings, it would be worth mentioning them, because the temptation to explain the interaction from the institution and the like might remain in some studies inside EM and CA. In addition, the arguments of these critics also show the way of thinking about the institution. The institution is thought as something that determines or at least effects the interaction from outside of it, and also have the idealistic or analytic entity.

(2) The first line of discussions concerning institutional settings

Now we return to the discussion inside EM. We could attribute the beginning of the first line of this discussion to E. Schegloff's argument against studies by D. Zimmerman *et al.*. West and Zimmerman find asymmetry of interruption between sexes in conversation, *i. e.* men interrupt women more frequently than the opposite. In another study by Zimmerman, he treats, for example, an "interrogative series" which consists of the dispatcher's question and the caller's answer sequence, which is specific to the police calls (Zimmerman 1984).

For Schegloff, their approaches seem to suppose two-stages of talk-

in-interaction and institution, and to assume that the latter defines the former, or that the former could be understood enough only when we take account of the later. He is against such a presupposition and refuses the easy way to invoke institution to explicate some features of talk. He argues that CA should show institution *etc. from* the details of the talk. He says, "the lively sense we may all share of the relevance of social structure... needs to be converted into the hard currency (if you'll pardon the cash nexus) of defensible analysis — analysis which departs from, and can always be referred to and grounded in, the details of actual occurrences of conduct in interaction" (Schegloff 1991 p. 48).

His criticism has several aspects. One of them is that CA should not commit to dualism of micro-macro social order in which CA is supposed to investigate only micro structures and supposed not to pay attention to macro structures. He insists CA should suspend this dualistic assumption itself (Schegloff 1987). Besides of this, we recognize a related but independent claim. That is CA should show how the talk-in-interaction is a certain type of talk (e. g. police call) for the parties of conversation from the details of talk, not imposing the type supposed by the investigators. So he criticises Zimmerman et al. because they do not show the parties' relevance to, say, men-women conversations in the conversation questioned. And we could see another aspect. With this aspect, before discussing social structure, CA should explicate conversational structure though which we can report or request to the police etc.. For instance, he points out that the "interrogative series" could be seen in particular ordinary conversation, and it could be recognized as a sequential feature of conversation when we request something.

(3) The second line of discussions concerning institutional settings But because of this strong claim to conversational structure,

Schegloff is also criticized in the second line of this discussion. His last claim sounds like that we must elucidate the phenomenon of *e. g.* police calls from conversational structure, and that if we cannot, we should not tell them as phenomenon of police call. But we must note that, like Schegloff, his critics also deny the dualistic assumption that the macro structure defines the interaction. They do not blame him because they think that talk-in-interaction needs to be explained also from the point of the macro structure. The issue is that Schegloff seems to claim as if CA could and should abstract "talk as such" from the phenomena of police calls (Watson & Sharrock 1991), and as if "that 'talk' acts the *foundation* of those activities" (Bjelic & Lynch 1992 p. 54).

The critics are cautious whether the phenomenon of police call should be investigated as talk-in-interaction rather than as an police call. In other word, they doubt that such phenomena could be reduced to or founded by the talk-in-interaction. Schegloff certainly refuses the temptation of the micro-macro dualistic explanation. But because of this, he seems to set up the talk-as-such as a foundation of *e. g.* police calls. As a result, paradoxically, it seems to us that he looks for more essential and profound elements of institution or social structure which remains after removing their appearance, though if he himself does not intended that or he is not interested such elements. So Watson and Sharrock recognize here "something very akin to Parsons' analytic realism" (Watson & Sharrock 1991 p. 24) which decomposes concrete phenomena asking for analytic reality, and which Garfinkel had refused. Bjelic and Lynch point out that we cannot say the talk is the foundation at least so far.

A police call would be already achieved and intelligible as a police call by "member", and it would be more than a case of talk-in-interaction. Ethnomethodological studies of work treat these phenomena. Watson *et. al.* are sensitive that sociological studies rely upon such intelligibility.

And such intelligibility is achieved before the professional sociological conceptualization.

Then the critics attempt the ethnomethodological studies of work which "... are revealing of the actual, on-going, situated practice, the mastery and use of natural language, the *competencies* involved in doing the work" (Psathas 1995 p. 148). We could say what they treat are "radical phenomena" (Garfinkel 1995), or "proto-phenomenon" in the sense Wittgenstein puts it as following. "Our mistake is to look for an explanation where we ought to look at what happens as a 'proto-phenomenon'. That is, where we ought to have said: *this language-game is played*." (Wittgenstein 1958 \rightarrow 1988 sec. 654) Therefore, as Bjelic and Lynch deliberately remark, "radical" or "proto" never means the above-mentioned foundation, rather it means "locally produced and naturally accountable" (Garfinkel 1995) phenomena.

In these phrases, Wittgenstein criticizes the conceptions that something behind the phenomena determines, leads or founds such phenomena. He shows the error of this conception by demonstrating that any activities could be on some interpretations, in accord with the rule. It is known that in this part of *Philosophical Investigation* he argues the rule-following. Through this argument, he refuses this conception and points out radicality of the language-game. As well known, he never argued that the rule makes the language-game possible. On the contrary, as Nagai put it very clearly, the fact language-game is achieved somehow makes rules possible. And this inversion of the rule and the game is the key of later Wittgenstein's conception of the language-game (Nagai 1995 p. 154).

Ethnomethodological studies of work might also do such a inversion. They treat the fact that the work is somehow achieved previous some rules or some structures which appear to make the work possible. And here we could see the studies by Zimmerman in a different way from

Schegloff's viewpoint. Indeed Psathas points out the possibility that Zimmerman talks about "an interrogative series" from the point how it "enable the *work* of the police to be carried out" (Psathas 1995 p. 145). At least, Zimmerman indicates that characteristics of police calls are not exclusive from the point of the talk and they are also part of the work of the police. His papers do not need to be seen necessarily as explanations that institutional settings determine the feature of talk-in-interaction.

In this chapter, we have argued to refuse the presupposition such as the interaction is insufficient phenomenon itself and needs to be explained from the point of the institution and the like. We also have observed this refusal does not conclude that we must begin with talk-as-such. Next chapter, we will examine another side of the problem concerning the interaction and the institution. It is the problem that the concrete interactions which are observed in the work place do not accord easily with the nature of institutions which investigators suppose. In other word, investigators faced the problem of how they connect the concrete interactions and the characteristics of institutions.

E. Bittner who wrote the paper "The Concept of Organization" (Bittner 1965) treats this issue. It was as early as the 1960's when Bittner wrote it. But in the studies of work, W. Sharrock, R. Watson and the others note importance of this paper (Anderson, Sharrock & Hughes 1991, Watson & Sharrock 1991), and they insist that this paper has been less seminal than it might (Anderson, Sharrock & Hughes 1991 p. 238). In this paper, Bittner investigated the concept of organization (or institution) in a different way from the conventional studies of organization. He pointed out dependency of the concept on member's use of the concept, on concept as a common-sense construct. And inquiring the concept, he referred to a rule from very similar point of view to Wittgenstein's, though it might not be a coincidence.

2. Institutions/organizations and rules

According to Bittner, sociologists have taken formal organizations as associations engaged in concerted activities which are directed to the specific objectives, instituted and rationally planned. And they have sought to study how well such "programmatically intended formal structures of organizations describe what is going on within them" (Bittner 1965 p. 239). But sociologists have noticed an insufficiency of such formal structure to describe the concrete interactions observed in the institutinal settings. That is to say, the structure itself can never adequately and fully reflect them. Zimmerman puts it, "numerous studies of formal organizations have found that some significant portion of the observed practices of bureaucrats are not easily reconciled with the investigator's understanding of what the formally instituted rules and policies dictate" (Zimmerman 1971 p. 222).

The some conventional studies of organization try to invoke such informal elements or bureaucrats' arbitrariness in order to explain the variety of concrete practices, presupposing certain distinction between the formal and the informal. The rule which defines prospectively the stable patterns of conduct in certain presumptively fields might be thought a criterion of this distinction. In thinking this way, they assume that the correspondence between the rule and the behavior that are related to it is clear. Bittner criticizes such assumptions, far from which, "when we consider the set of highly schematic rules subsumed under the concept of rational organization, we can readily see an open realm of *free play for relating an infinite variety of performances to rules* as responses to these rules" (Bittner 1965 p. 251, emphasis mine). The difficulty to reconcile concrete activities with formal rules lies on appling or following rules, or more precisely on *the assumption about the rule itself*, rather than

mingling informal elements with formal organizations.

Rules must be used in concrete settings, but such settings or situations to apply rules leave unsaid. And they are open to scrutiny if one want to. Bittner refers this as a similar problem to *ceteris paribus* clause. In concrete and actual settings, investigators construe a certain activity as one against a rule that they understand under the formal organization and also as one accord with a rule for the sake of a special reason of this settings. As often pointed out, how to apply rules is not written in the rules. If it is, literal justification would be exhausted for some time. Through a sited phrase, Bitter makes us face something like Wittgenstein also describes. "[H]ow can a rule shew me what I have to do at *this* point? Whatever I do is, on some interpretation, in accord with the rule... Then can whatever I do be brought into accord with the rule?" (Wittgenstein 1958–1988 sec. 198)

As a matter of fact, however, Bittner or Wittgenstein do not claim the impossibility of rule-following. But they attack the very formal logical conceptualization of the rule which serves as a presupposition of conventional studies. Given this conception, they show that restrictive rule-following is principlly impossible. And we might say that this recognition of impossibility is already shared by conventional but more eraborated studies of organization, like P. Selznick's in a sense. According to Bittner, Selznick notices that the formal structre of organization is "ideally possible, but practically unattainable state of affairs" (Bittner 1965 p. 242). But over again, this idealistic assumption of rules, formal structures or institutions is a stumbling block.

"It can be seen that there is a misunderstanding here from the mere fact that in the course of our argument we give one interpretation after another... What this shews is that there is a way of grasping a rule which is not an interpretation, but which is exhibited in what we call 'obeying

the rule' and 'going against it' in actual cases" (Wittgenstein 1958→1988 sec. 201).

"We propose that we must proceed from the theoretical clarification of the essential limitation of the formal rules achieved by Selznick to... the study of the skill and craftsmanship involved in their use, and to a reconsideration of the meaning of strict obedience in the context of varied and ambiguous representation of it" (Bittner 1965 p. 251).

They recommend to consider the actual case which we call "obeying the rule" and "going against it", and how the concept of rules or institution *etc.* is used by "member". It could be said that they forcus on the langage-game as a proto-phnomnenon which makes rules function. In studies of organization, this requires studies of mundame practices where they use rules. And these competent practices cannot be achieved by organizational rules, but they achieve such rules. Therefore, the rules are a part of their activities and a part of skills or craftsmanship informing their organizational feature. "Extending to the rule the respect of compliance,... is the gambit that characterizes organizational acumen" (Bittner 1965 p. 251).

In next chapter, let us show the data concerning rules.

3. Following rules as a part of skills informing their institution/organization

Through showing these cases, we would like to indicate a skeptical viewpoint of rule which Selznick (or a Kripkian reading of Wittgenstein) represents, at first. Second, we point out that there must be some accordance for discrepancy of interpretating the rule. Third, we would like to show how the situation to apply a rule has changed for the participants in the call of [CASE 7].

[CASE 7] (X: 2-9) Request for an ambulance at a certain time 1 [In this case alone, the original transcript's lines will be put in brackets and numbered in the below segment, in order to make clear the extent of elision and continuity in the following data. However, when we refer to some statements, we will use number without brackets.]

- 1 [1] D1: moshi moshi: hai ichi ichi kyuu shoubou desu. kaji desuka kyuukyuu desuka (Hello, yes, 119 fire fighting headquarters. Fire or ambulance?)
- 2 [2] C1: a ano: kyuukyuusha (Uh well, ambulance)

(an elision)

[C 2 = another caller states that his mother is ill and he wants to send her to the regular hospital which she is under the care of. He also says he has already informed the hospital, and that he was told to be there by1: 30 because the doctor could not arrive until then.]

- 3 [64] D1: ichiji-han desuka
 (One thirty?)
- 4 [65] C2: ichiji-han (One thirty)

(3.0)

- 5 [66] D1: a so desuka (Is it so)
- 6 [67] C 2: desukara: (So)
- 7 [68] D1: hai (Yes)

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8 [69] C2: ano: sorede uchi: kunno niwane: (.) ano pi: po: o nar-
             asanai de:
             (Well: and when you come here, uh, please don't maki a
             sound "PI: PO:")
9 [70] D1: e: souiu wake niwa kyu: kyuukyuusha namonde
             (Uh: we should, since it's an am-ambulance car)
10 [71] C 2:
                                    (( ))danchi none
                                    (A housing complex (DANCHI)'s)
(an elision)
11 [79] D1: danchi desuka?
             (A housing complex (DANCHI)?)]
                   12 [80] C2:
                   hai
                   (Yes)
(2.0)
13 [81] D1: e: kyu siren o narasanai to iu wakeniwa ikanaindesuga
             (Uh: ambu-we must sound the siren)
14 [82] C 2: hai
             (Yes)
15 [83] D 2: ano ichiji-han ni: souitta yoyaku mitaina kanjide kyuukyuu-
             sha dasu wakeniwa ikanain desu yone:
             (Well we can't send an ambulance at 1:30 like a reservation)
16 [84] C2: ha: ha: ha:
             (Oh:)
               ١
17 [85] D 2:
               hai
               (No)
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18 [86] C 2: ha: sou desuka

(Oh: that's so)

- 19 [87] D 2: kyuubyou de: kara mukatte byouin no hou hansou suru to itta: ano(.) kinkyuu no sharyo desukara:

 (It is uh, a vehicle used to carry urgent cases to the hospital immediately)
- 20 [88] C 2: hai (Yes)
- 21 [89] D 2 : e : kyuukyuusha no siren mo narasanai to iuwakeniwa ikanaindesu yo

(Uh: We must sound the siren of the ambulance)

- 22 [90] C 2: so: desuka: (That's so)
- 23 [91] D2: chikaku ittara tomemasu kedo:

 (Though we'll stop it when we get closer)
- 24 [92] C 2: hai (Yes)
- 25 [93] D2: ichiji-han ni iku to iukotowa chotto dekinaindesu yone:
 (We can't go at 1:30)
- 26 [94] C 2: dekinai= (You can't)
- 27 [95] D2: =taxi ja naidesu kara (It isn't a taxi)
- 28 [96] C 2: a: so: desuka (Uh: is that so)

So far, the dispatchers (D1 and D2) *seem* to follow the rules fully and to decline the caller's impossible requests on the contrary "free play for relating an infinite variety of performances to rules" (Bittner 1965 p. 251).

In line 9, 13, and 21 the dispatchers refuse the request not to sound the siren, in line 15 and 25 they refuse to send an ambulance at requested time. In addition, they even refer to the role of the ambulances or an objective which would be presumable of organization as a reason in line 9, 21. But in following exchange, they invoke another task of ambulance or another objective to send an ambulance this time.

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[CASE 7'] [X:2-9] case7's continuation
29 [97] D 2: hai (2.0) kin
             (Yes. Emer-)
30 [98] C 2:
                 ja ano:: osokutemo hayakutemo ne:
                 (Then, well, later or sooner)
31 [99] D2: hai
             (Yes)
32 [100] C2: isha no tsugo de (.) sonokoro: (.) naraba to iukoto nande
              ne:: byouin renraku shitara (.) desukara: kyuukyuu de
              ((iku))ndakara ne : sou kattena kotomo dekimasen ga :
              (This schedule is, at the doctor's convenience, they said,
              when I asked the hospital. So, since we will go by ambu-
              lance, we can't do as we like though)
33 [101] D 2: hai
              (Yes)
34 [102] C 2: e: nanji goro dekima a: onegai dekimasu ka?
              (Uh: what time can you-could you come?)
(2.0)
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35 [103] D 2: a: kore wa: (2.0) ima: ano guai ga warukute: sugu:
              (Uh: Is this... now uh:, her illness... soon)
                                              [
36 [104] C2:
                                              hai
                                              (Yes)
37 [105] D 2: kyuukyuusha ga hitsuyou to iuwakedewa naindesu ka
              (You don't mean you need an ambulance now?)
38 [106] C 2: iya iya: ano: jouyousha dewa ikenaindesu yone:
              (Yes, yes, well it is impossible to go by car)
(1.5)
39 [107] D 2: a jouyousha de: wa chotto muri dakara kyuukyuusha de
              (Oh, it is impossible to go by car, then ambulance)
(0.5)
40 [108] C 2: so nan((desu yo))
              (That's right)
(a elision)
 [D2 begins to ask about her condition, and C2 tells about it.]
41 [156] C 2: i::: mata: kesa mo shukketsu shite ne:
              (i: [sound], this morning she was bleeding again)
42 [157] D2: hai
              (Yes)
43 [158] C2: honnin ga souiu kankei de mo:::(( )) jouyousha dewa
              mo: ikene: tte uttenda yone
              (She herself says, because of it, no more- she can't go by
              car any more)
44 [159] D2: a: arukenai joutai desu ne
              (Oh: so she can't walk)
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(Uh :: I'll get her ready now then)

A change occures at line 38. After this line, the criterion to send an ambulance seems to shift to that the patient can not travel by car. Indeed, D2 begins to ask the condition of patient after this line. Therefore, they are to invoke another task of ambulance or another objective to send an ambulance this time. Certainly in last part, D2 still tells he will send an ambulance "right now" (line 47). In this point, we could think, after all, this case was not against the objective or criterion which he mentioned first, that is "the vehicle to carry urgent cases to hospital immediately" in line 19. However, we would like to note, if they sent an ambulance at 1:30, we could also interpret it as an activity according with the rule by invoking special reasons of this case. We might think that the reason to send an ambulance seems to lie not in urgency but that the patient can not travel by car, on the condition that the doctor is absent and so on. To just make it clear, let us show another case.

[CASE 8] [Y: 12: 23-] Request for ambulance at a certain time 2 [In previous exchange, the caller who is a doctor requested to carry a psychiatric patient to another hospital. The dispatcher asked the location of that hospital, and whether a doctor or nurse will go together and so on.]

1 D: hai (.) sou desuka (.) ja:ne (.) a hai (.) e: (.) moshi moshi (.) de sugu de yoroshiindesu ka (.) sugu de yoroshii desu ka (.) kyuukyuusha wa

(Yes, really, then, uh yes, year, hello hello? And is it all right to send now? Is it all right to send it now? an ambulance, I mean)

(an elision)

2 D: hai ja ichiji-han goro ((to iuka))(.)ju:niji-han gorotte iukotowa (.) ichiji goro desu ne (.) ja: juugofun kurai mae ni tsuku youni ((unten shimasunde)) (.) hai hai

(Yes, then around one thirty, say, around twelve thirty means, it'll be around one o'clock, then in order to arrive about fifteen munites before ((we'll drive)))

Though this is data from a different dispatch center, we do not mean to indicate that Y center is, or this dispatcher is more flexible than the former center or dispatcher. Nor we want to tell that requests by such organization as hospitals or police tend to be accepted easily. If these things are the case, we just want to emphasis we can infer that sending an ambulance at a certain time is also to follow a rule on a certain condition. And as we mentioned before, this concrete condition is never written in the rule itself. Then "how can a rule shew me what I have to do at *this* point?" It is basically the case in the former part of [CASE 7] which a rule seems to determine activities clearly, given "whatever I

do is, on some interpretation, in accord with the rule". Or we could doubt if this is an occasion when such and such a rule is applied, say, infinitely. For example, D 2 refers to "now" and "soon" many times, but what span do they mean, and do not they include 1:30?

Of course, for both the dispatchers and the caller, it is clear that "now" does not include 1:30 here. But they do not know it because that rule determine it. And in some case, the very time span of "now" or "soon" is questioned. That "now" does not include the time 1:30 is a prerequisite for following or understanding the rule. "Strict obedience" even depends on such a context as it could be questioned in other case. But we must emphasis "now" was understood without interpretation in this case, and it does not require further explication. On the contrary, while we consequently suggested a difference of these 2 cases (and maybe vagueness), it is meaningless if we do not presuppose they recognize such distinction of the time in both cases (the former send ambulance soon, the latter does not). When we invoke a rule and say such and such activity is allowed or inhibited, we cannot help presuppose unsaid condition. This is what Wittgenstein says, "a way of grasping a rule... which is exhibited what we call 'obeying the rule' and 'going against it'" (Wittgenstein 1958→1988 sec. 201).

So, invoking another aspect of a situation or interpreting a rule itself is embodied in the activities, and that situation or interpretation is also estimated as a part of the activities. In [CASE 7], C 2 shows his understanding to a organizational rule in line 32. His excuse that his request is not based on his convenience but upon the doctor's convenience could be seen as part of this understanding. Line 34's utterance("what time can you-could you come?"), therefore, could be heard as his interpretation of this rule. That is, he might mean if he cannot request the ambulance at a certain time, what time he could get it? But this

question rather deepens D2's doubt if it is an appropriate request for an ambulance, because this utterance means C2 does not require it *now*. (In 35 and 37 line, which are after this question, D2 asks whether C2 need an ambulance now because she is ill, referring "now" and "soon".) But in line 38, C2 can give another piece of information about the situation to which D2 applies a rule. After line 38, the statement "impossible to go by car" (in line 38, 39, 43, 44) become to work as another criterion to send an ambulance, which was not apparent so far. We mentioned that this statement changes the situation from the one which the dispatchers supposed at first and to which they apply the rule, but we should also mention that the situation depends on the dispatcher's competency which judges the imformation that should be taken into account, and that the situation is organized as a situation through the activities of the dispacher and the caller.

In this part, we have argued the relationship between talk-interaction and institution/organization to refuse the presupposition such that the interaction is insufficient phenomenon itself and needs to be explained from the point of the latter. The interaction does not need to be thought such a narrow way. We intended to show radicality of interaction which is localy produced and naturally accountable. First, we examined this idea through reviewing the discussions in EM and CA. Next, we took the problem that the concrete interactions which are observed in the institutional settings do not easily accord with the institutions which investigators suppose. We suggested that the problem occurs because of the idealistic assumption of institutions or their rules, and that we could investigate institutions or rules as their usage, a member's matter. In last chapter, we examined the call in which the caller and the dispatcher use, invoke, and follow rules.

(Kamiyo KITA)

[Notes]

- 0. Part I was delivered at the meeting: "Ethnomethodology and Conversation Analysis: East and West", which was held by the International Institute for Ethnomethodology and Conversation Analysis. This meeting took place on August 21-23, 1997, at Waseda University, Tokyo, Japan.
- 1. All of the data used by this paper are the one obtained by joint research "Sociological research of the 119-call" by the organization named "Research association of Institutional Settings (The members are Masaki Akiba, Tomoko Ueda, Shigeru Urano, Mitsuhiro Okada, Keiko Takayama, Satoyuki Morita, Kamiyo Kita, and Yoshio Kashida)".

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- 2. Our transcription system is below.
 - ① (•••A bracket connecting the talk of different speakers shows that overlapping talk begins at that point.
 - ② = ••••Equal signs, one at the end of a line and one at the beginning, indicate no gap between the two lines.
 - ③ :: •••Colons indicate prolongation of the immediately prior sound. The length of the row of colons indicates the length of the prolongation.
 - 4 (English) ••• Parenthesized sentences are English translation
 - ⑤ ((word))···Double parentheses are possible hearings.
 - 6 D1, D2...Numbers which D or C is accompanied with, show

alternations of speakers.

- 3. As for the definition and the explanation of the priority structure, See (Levinson, 1983) Chapter 6.
- 4. The notion of institution seems to refer to the formal organization sometimes, and to broader established and conformed pattern of behavior. We would like to jaxtapose these two words here. We use one of them to represent them below. One of the reason is that the notion of institution and organization seems to be not used in a clearly distinguished way (though the institution tends to refer to a broader and more abstract phenomena), and, probably because of this, Sharrock et al. to whom we owe much of our argument to, uses both terms. Also when Schegloff, Drew and Heritage use "institutional interaction" and the like, we could paraphrase the institution as a formal organization (Schegloff 1992, Drew & Heritage 1992). And second, we believe that Bittner's paper "The Concept of Organization" has the implication for the studies of institution. Third, though one of us mentioned another paper (Kita 1996). the terms like "institution", "organization" and "social structure" are used almost in the same way in CA. The terms seem to refer to the thing(s) which traditional sociologies treat and which is supposed to be "outside" conversation.
- 5. The studies we will mention as third view point next paragraph tend to use the term "work" or "practice".
- 6. The recent comprehensive and elaborated argument on the institution, see Seiyama 1995, whose point of view is different from us though. And further, he points out normative aspect of the institution in this book. We can note he uses the term organization too.
- 7. Watson & Sharrock state the following, "the issue becomes: if some feature is found to be present in a call to the cops, is it there because

- it is a property of 《calls to the cops》 or is it because it is a property of certain feature of talk as such?" (Watson & Sharrock 1991 p. 24)
- 8. Some ethnomethodologists insist that a certain phenomenon already possesses generality by member's gross or description before sociologists try to generalize it. H. Sacks points to this issue as a "generalized description" (Sacks 1961–1990), Garfinkel & Wieder call it "unique adequacy" (Garfinkel & Wieder 1992).
- 9. Garfinkel & Sacks use the notion of "member" to refer to "mastery of natural language" rather than to refer it to a person. (Garfinkel & Sacks 1969→1986 p. 163)
- 10. Garfinkel who is a originator of EM himself does not refer to Wittgenstein so much, but many ethnomethodologists point out Wittgenstein's inspiration to EM. (see, Button & Sharrock 1993, Sharrock 1997, Lynch 1993, Coulter 1989, Heritage 1984–1989)
- 11. Garfinkel even uses the word "foundation". And indeed, they remark about its different implication. (Bjelic & Lynch 1992 p. 54)
- 12. Concerning the talk, Schegloff might describe the language-game rather than the rules of conversation too, in this sense. Still, they differ in what they think as radical phenomena or, more precisely in whether they are conscious to radical phenomena.
- 13. Though Bittner himself does not refer to Wittgenstein in this paper, we do not think it is just a coincidence that Sharrock who is well versed in Wittgenstein evaluates this paper and pursues studies in this line.
- 14. Takayama views this case from the point of organizing a claim of emergence through mutual confirmation of parties in this exchange. She mentions that from the statement in line 105 ("it is impossible to go by car") the dispatchers began try to organize the emergency, using this part of utterance (Takayama 1996). We are also going to show that this statement is a kind of turning point, but we would like to stress

here that a different aspect of this situation to apply a rule seems to be visible, or another rule to send an ambulance seems to begin to work after this statement.

- 15. In Y dispatch center, we could record callers' voices only when the calls were received on the main table (and some of them are not available). In this case, therefore, we cannot catch the caller's words, but still we can figure out what the caller means. Furthermore, we can understand the caller's situation of this call. We could note that we got this information from the (one-sided record of) call itself. This is a one-sided record of a naturally occurred exchange.
- 16. To tell the truth, we do not need to show [CASE 8], since we can just imagine possibility that sending an ambulance at a certain time accords with a rule any way. As we can just imagine the pupil who continues a +2 series 1000, 1004, 1008... beyond 1000, and still believes following the rule (Wittgenstein 1958 sec. 185). Rather, we might run a risk that our inference is taken as realistic and plausible. Because [CASE 7] might not be a supposed vague case but a real vague case. That is, a vagueness for "member", not for investigators. And we do not intend to deny the existence of such vagueness.

[References]

- Anderson, R., W. W. Sharrock & J. A. Hughes 1991 "The Division of Labour," in Conein, B., N. de Fornel et L. Quéré(eds.), *Les Formes de la Conversation*, Vol. 2, ENET, pp. 237-252.
- Bittner, E. 1965 "The Concept of Organization," *Social Research* 32(3), pp. 239–255.
- Bjelic, D. & M. Lynch 1992 "The Work of a (Scientific) Demonstration: Respecifying Newton's and Goethe's Theories of Prismatic Color," in Watson, G. & R. M. Seiler(eds.), *Text in Context, Sage*, pp.

- 52 78.
- Boden, Deirdre & Don H. Zimmerman(eds.) 1991 Talk & Social Structure: Studies in Ethnomethodology and Conversation Analysis, University of California Press.
- Button, G. & W. Sharrock 1993 "A Disagreement over Agreement and Consensus in Constructionist Sociology," *Journal for the Theory of Sociological Behaviour* No23, pp. 1-5.
- Bourdieu, P. 1987 Chose dites, Editions de minuit.
- Coulter, J. 1989 Mind in Action, Polity Press.
- Drew, P. & J. Heritage 1992 "Analyzing Talk at Work," in Drew, P. & J. Heritage (eds.) *Talk at Work: Interaction in Institutional Settings*, Cambridge University Press, pp. 3-65.
- Garfinkel, H. 1991 "Respecification: Evidence for Locally Produced, Naturally accountable Phenomena of Order, Logic, Reason, Meaning, Method, etc. in and as of the Essential Haecceity of Immortal Ordinary Society (I)- An Announcement of studies," in Button, G. (ed.) Ethnomethodology and the Human Sciences, Cambridge U. P., pp. 10–19.
- Garfinkel, H. & H. Sacks 1969 "On Formal Structure of Practical Actions,"→1986, in Garfinkel, H.(ed.), *Ethnomethodological Studies of Work*, Routledge & Kegan Paul, pp. 160-193.
- Garfinkel, H. & D. L. Wieder 1992 "Two incommensurable, asymmetrically alternate technologies of social analysis," in Watson, G & R. M. Seiler(eds.), *Text in Context: Contributions to ethnomethology*, Sage Publications, pp. 175-206.
- Giddens, A. 1997 Studies in Social and Political Theory, Hutchinson & Co.
- Heritage, J. 1984 Garfinkel and Ethnomethodology, Polity Press.
- Hutchins, E. 1990 "The Technology of Team Navigation", J. Galegher,

- R. Kraut & C. Egido (eds.) *Intellectual Teamwork: Social and Technical Bases of Cooperative Work*, Hillsdale.
- Ishii Hiroshi 1994 Design for groupware (gurupuuea no dezain), Kyoritsu Shuppan.
- Kashida, Yoshio 1995 "How an emergency call is accomplished through 119 talk? (119 ban tuuwa ni okeru kinnkyuu-dennwa rashisa no tassei)" *The Annual Review of Sociology (Nennpou Shakaigaku Ronnsyuu)* 8, pp. 227-238.
- Kita, Kamiyo 1996 "On Self-describing Aspects of Institution/Organization: The Case of 119 Call (seido/soshiki no jiko kijutu teki sokumen ni tsuite: 119 tsuwa no jirei o toshite), *The Journal of Studies in Contemporary Social Theory (Gendai Shakai Riron Kenkyuu)* No. 6, pp. 121–132.
- Kripki, S. A. 1982 Wittgenstein on Rules and Private Language, Blackwell Publisher Ltd.
- Levinson, S. C. 1983 Pragmatics, Cambridge University Press.
- Lynch, M. 1993 Scientific Practices and Ordinary Action, Cambridge U. P..
- Nagai, Hitoshi. 1995 Wittgenstein nyuumon (A Wittgenstein Primer), Chikuma Shinsho.
- Okada, Mitsuhiro. 1994 "Ikutsu no ethnomethodology ga arunoka (How Many Ethnomethodologies are there?)," *Shakaigakuronko* No. 15, pp. 93-120.
- Psathas, G. 1995 "'Talk and Structure' and 'Studies of Work'," *Human Studies* 18, pp. 139–155.
- Sacks, H. 1961 "Sociological Description," →1990 in Coulter, J. (ed.), Ethnomethodological Sociology, Edward Elgar, pp. 85-95.
- Schegloff, E. A. 1968 "Sequencing in Conversational Openings" *American Anthropologist* 70, pp. 1075–1095.

- Schegloff, E. A. 1987 "Between Micro and Macro: Contexts and Other Connections," in Alexander, J. C. et al. (eds.), The Micro-macro Link, Columbia U. P., pp. 207-234.
- Schegloff, E. A. 1991 "Reflections on Talk and Social Structure," in Boden, D. & D. H. Zimmerman (eds.), *Talk and Social Structure:* Studies in Ethnomethodology and Conversation Analysis, University of California Press, pp. 44–70.
- Schegloff, E. A. 1992 "On talk and its Institutional Occasions," in Drew, P. & J. Heritage (eds.) *Talk at Work: Interaction in Institutional Setting*, Cambridge University Press, pp. 101-134.
- Seiyama, K. 1995 Composition on Instituton (Seidoron no kouzu), Sogensha.
- Sharrock, W. 1997 "Do the right thing!: Rule Following and Social Order," (paper presented at The International Conference for EMCA. Waseda University, tokyo)
- Sharrock, W. & R. D. Watson 1988 "Autonomy amang Social Theories: The Incarnation of Social Structures," in Fielding, N. (ed.), *Actions and Structure: Reserch Methods and Social Theory*, Sage, pp. 65-77.
- Sharrock, W. & R. D. Watson 1989 "Talk and Police Work: Notes on the Traffic in Information," in Coleman, H. (ed.), Working with Language: a Multidisciplinary Consideration of Language Use in Work Context, Mouton de Gruyter, pp. 431-449.
- Takayama, Keiko 1996 "Organizing Request and Complaint in Emergency Call (Kyuukyuu jitai no kakutei sagyou: 119 ban ni okeru yosei to uttae no soshikika)", The Journal of Studies in Contemporary Social Theory (Gendai Shakai Riron Kenkyuu) No.6, pp. 149-164.
- Watson, R. & W. Sharrock 1991 "Conversational Actions and Organisation Actions," in Conein, B., N. de Fornel et L. Quere(eds.), *Les*

- Formes de la Conveation, Vol. 2, ENET, pp. 21-34.
- West, C. & D. H. Zimmerman 1977 "Women's Place in Everyday Talk: Reflections on Parent-Child Interaction," *Social Problems* No. 24, pp. 521–529.
- Whalen, Jack 1995 "A Technology of Order Production: Computer-Aided Dispatch in Public Safety Communications." Paul ten Have & George Psathas (eds.) Situated Order: Studies in the Social Organization of Talk and Embodied Activities, International Institute for Ethnomethodology and Conversation Analysis & University Press of America (Washington, D. C.).
- Whalen, M. R., & Zimmerman, D. H. 1987 "Sequential and institutional contexts in calls for help" *Social Psychology Quarterly* 50: 172 –185.
- Wittgenstein, L. 1958 *Philosophical Investigation*, Basil Blackwell. →1988 (3rd edn.)
- Zimmerman, D. H. 1971 "The Practicalities of Rule Use," in Douglas, J. D. (ed.) *Understanding Everyday Life*, Routledge & Kegan Paul, pp. 221-238.
- Zimmerman, D. H. 1984 "Talk and Its Occasion: the Case of Calling the Police," in Schiffrin, D. (ed.), *Meaning, Form, and Use in Context: Linguistic Applications*, Georgetown University Roundtable on Language and Linguistics, Georgetown University Press, pp. 210-228.
- Zimmerman, D. H. & D. Boden 1991 "Structure-in-Action: An Introduction," in Boden, D. & D. H. Zimmerman (eds.), Talk and Social Structure: Studies in Ethnomethodology and Conversation Analysis, University of California Press, pp. 3-21.