NII Shonan Meeting Report

No. 2015-6

Lorenza Mondada, Basel University

Mayumi Bono, National Institute of Informatics/SOKENDAI

(The Graduate University for Advanced Studies)

Aug Nishizaka, Chiba University

March 19-21, 2015

Instruction and Instructed Action:

Embodied Reciprocity in Interaction

Organizers:

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The goal of this workshop is to discuss embodied reciprocity in interaction with a special reference to instruction and instructed action. Instructions can be found everywhere, from ordinary life to the workplace, they are a frequent type of action through which one person not only shows and demonstrates, but also requests another to do something, which is realized in instructed action. Although instructions have been widely studied from a diversity of linguistic and sociological perspectives, we contextualize them in the tradition of ethnomethodology and conversation analysis. Instead of treating instruction as a unidirectional speech act that determines the following action, we consider instruction and instructed action as paired actions that are mutually dependent, and that are interactionally achieved (e.g. Garfinkel, 1967). In order for instruction to complete, recipients interpret and produce embodied practical actions (Suchman, 1987). This mutual dependency, or reflexivity between instruction and instructed action, is one of the important themes in this workshop.

Instruction has been largely studied in educational settings including classrooms (Macbeth, 2011), crochet lessons (Lindwall & Ekstöm, 2012), trainings in surgery (Koschmann et al.,

2011; Sanchez Svensson et al, 2009), and driving lessons (De Stefani & Gazin, forthcoming). While institutional contexts are a useful place to examine how instruction is sequentially constructed and how it is supported by those who provide and receive an instruction, such as a teacher and a student, (for the IRF/IRE sequence, see Sinclair & Coulthard, 1975; Mehan, 1979), we expand the scope of analysis and consider the fact that instruction is prevalent in a wider range of social situations including ordinary interactions between families and friends, workplace, and technologically mediated environments. Specifically focusing on Conversation Analysis, Ethnomethodology and closely related approaches, our aim is to examine the situated and embodied nature of instructions. In a surgical operation room, for example, the surgeon's directives instruct his or her assistant's embodied action, such as handing in an appropriate instrument to the surgeon. Although instructions are highly indexical, they are understood within the praxeological context of the ongoing procedure, in which responsive instructed action reflexively provide for the intelligible character of minimal instructions (Mondada 2014). In a robot/android theater, the director's instruction of timing a 1-second pause is accomplished in the course of interactions made in multiple rehearsal sessions. Instead of using a watch, actors appropriately arrange and "craft" their bodies in order to perform the pause. (Bono, in preparation). These studies suggest that instruction and instructed action are not simply correlated, but mutually dependent, locally organized actions involving various semiotic resources such as language and the body as well as material objects such as tools and computers. In addition, structural properties of the environment play an important role in achieving instruction. Nishizaka (2006) examines interactions in violin lessons and discusses how the instruction of correctly performing quarter notes is collaboratively achieved. When the child who learns to play the violin and her mother as a piano accompanist perform in front of the teacher, they not only produce musical sounds, but also structure and restructure their interactional environment. The understanding of the instruction is intricately displayed and demonstrated in the courses of interaction.

Building on this line of research, the workshop addresses specific issues related to the indexical character of instruction, namely, the ecology in which instructions and instructed actions take place including the spatial and material environment, as well as the technologies that might mediate them. To engage in such an interactional environment, participants systematically use the embodied and verbal resources and coordinate the

temporality of the first and the second action. We explore these issues by considering a diversity of social contexts, ordinary as well as institutional. The workshop will be interdisciplinary, covering ethnomethodological and conversation analytic studies in linguistics, sociology, anthropology, sciences of education and, last but not least, informatics, engineering and technology studies. The focus of instructions and instructed actions provides the opportunity to contribute to these areas of study. For example, participants encounter misunderstandings in talking through helplines where users having problems with their computers, giving instructions about how to handle photocopy machines (Suchman, 1986), or discussing how to develop or implement new software (Button & Sharrock, 1995). Analyses of talk in problem solving, repairing, and learning of technological devices are not only of interest to linguists who seek to understand the social nature of language, but also to engineers who develop better tools in these situations. Additionally, the detailed description of how multimodal resources are assembled in the context of instruction helps engineers to automatically detect and identify the aforementioned reciprocity that is typically negotiated in the moment of interaction and constructed without words. The aim of this workshop is to provide engineers with insights into how to systematically observe such reciprocity and find ways to apply to the fields of computer science.

Participants

- Lorenza Mondada, Basel University
- Mayumi Bono, National Institute of Informatics/SOKENDAI (The Graduate University for Advanced Studies)
- Aug Nishizaka, Chiba University
- Chiho Sunakawa, National Institute of Informatics
- Matthew Burdelski, Osaka University
- Hiromichi Hosoma, Shiga Prefectural University
- Oskar Lindwall, The University of Gothenburg

- o Mika Enomoto, Tokyo University of Technology

- o Eric Hauser, University of Electro-Communications and University of Hawaiʻi at Mānoa

- o Satomi Kuroshima, JSPS/Chiba University

- o David Aline, Kanagawa University

- o Kaoru Hayano, Ochanomizu University

- o Domenic Berducci, Toyama Prefectural University

- o Eiko Yasui, Nagoya University

- o Akira Takada, Kyoto University

- o Ayami Joh, National Institute of Informatics

- o Kohei Kikuchi, JSPS/National Institute of Informatics

- o Hideyuki Sugiura, Ibaraki University

Schedule

Wednesday, March 18
- o 15:00 Hotel check-in (Early check-in can be arranged. Please contact the organizers in advance)

- o 18:00 Business meeting: the organizers

- o 19:00 Welcome reception

- o 21:00 Free time

Thursday, March 19
- o 7:30 Breakfast

- o 9:00 Introduction of Shonan Meeting (Movie)

- o 9:10 Opening remark: Mayumi Bono

- 9:15-10:30 [LECTURE] **Lorenza Mondada**: General lecture on instructions
- 10:30-10:45 Coffee break
- 10:45-12:15 [PAPERS] single session
    - 10:45-11:25 PAPER1: **Matthew Burdelski**: Verbal and embodied instruction and response in caring for a pet
    - 11:25-12:05 PAPER2:**Hiromichi Hosoma**: Gesture generating "rule": multi-modal activities in card game
- 12:05 Lunch
- 13:30 Group photo
- 14:00-16:00 [DATA SESSION] single session
    - DATA SESSION1: **Oskar Lindwall**: Corrections and embodied demonstrations of instrumental actions
- 16:00-16:30 Break
- 16:30-18:30 [PAPERS] single session
    - 16:30-17:10 PAPER3: **Mika Enomoto**: Interactiveness, concurrency, and situatedness in achieving the preparatory conditions of "commanding"
    - 17:10-17:50 PAPER4:**Chiho Sunakawa**: Instruction and instructed actions: learning to become an orchestral conductor
- 18:30 Dinner
- 20:00 Free time

Friday, March 20
- 7:30 Breakfast
- 9:10 Opening remark: Mayumi Bono
- 9:15-10:30 [LECTURE] **Lorenza Mondada**: Instructing a pilot driving on a race circuit
- 10:30-10:45 Break
- 10:45-12:15 [PAPER] single session

- o 10:45-11:25 PAPER5: **Eric Hauser**: Monitoring an instructed action and projection of the next instruction through gaze shift
- o 11:25-12:05 PAPER6: **Satomi Kuroshima**: Monitoring for instructions: Temporal organization of giving an instruction in a distance-learning system
- o 12:05 Lunch
- o 13:30 Group photo
- o 14:00-16:00 [DATA SESSIONS] parallel session
  - o DATA SESSION2: **David Aline**: Instructed actions in Japanese elementary school English activities classes
  - o DATA SESSION3: **Kaoru Hayano**
- o 16:00-16:30 Break
- o 16:30-18:30 [PAPERS] single session
  - o 16:30-17:10 PAPER7: **Domenic Berducci**: Interactional (non-instructional) training of human infants into sociality
  - o 17:10-17:50 PAPER8: **Eiko Yasui**: On an instruction involving a language translation at a Japanese traditional dance session: Collaboration between the instructor and interpreter
  - o 17:50-18:30 PAPER9: **Mayumi Bono**: Indirect instruction: How the director, engineer, and actors jointly construct conversation on the stage
- o 18:30 Main banquet
- o 20:30 Free time

Saturday, March 21
- o 7:00 Hotel check-out
- o 7:30 Breakfast
- o 9:00-10:15 [LECTURE] **Aug Nishizaka**: Normative orientations in sentential construction of procedural instructions in massage therapy
- o 10:15-10:30 Break
- o 10:30-12:30 [DATA SESSIONS] parallel sessions

- o DATA SESSION4: **Akira Takada**: Language socialization and shaming in Japanese caregiver-child interactions
- o DATA SESSION5: **Ayami Joh**
- o 12:30 Lunch
- o 13:30 Closing

Abstracts

LECTURE1: Lorenza Mondada

Title: Instructing someone to do something right now: Temporal, embodied, and praxeological organization

This talk reflects on the systematic organization of actions that ask somebody to to something immediately – in which the instruction takes the form of a directive turn and the instructed action in response constitutes the realisation of the action requested upon.

In order to give a detailed and systematic account of this kind of instructions, I use various data sets – such as video recordings of surgeons operating on a patient, coaches instructing race drivers, young people playing video games. Their analysis explores the sequential, temporal and multimodal organization of these sequences. First, I will characterize the *sequence* in which they feature in the first position, followed by a response, which is generally done in an embodied and silent way in the second position – closed by a possible closing third. Second, *the format of the first pair part* containing the instruction will be detailed: these are very short turns, often produced with an accelerated pace, in which the verbal form can be co-occurring with some locative expression but often constitutes a single TCU. Moreover, these turns are often formatted in a multimodal way, containing an imperative as well as gesture and other body movements – in some cases the same gesture alone can do the same work. Third, the analysis studies the*contextual features* of these sequences, with a special focus on their indexical character and on their embeddedness in the praxeological context (i.e. the details of the context of the ongoing embodied action, such as operating, driving, gaming). Fourth, the normative expectations related to these actions and to their responses are particularly revealed by the use of *negative turn formats*, which show an orientation to current trajectories of action that are possibly projectable, to

anticipated or achieved actions that are negatively sanctioned and to issues concerning the capacity, ability, competence and expertise of the co-participants granting the action. This latter point builds on the temporal praxeological characteristics of the ongoing actions but allows the analysis to highlight their deontic and normative dimension.

PAPER1: Matthew Burdelski

Title: Verbal and embodied instruction and response in caring for a pet

This paper will explore ways in which pet care may be a crucial site of instruction and learning. Research on human-animal interaction is recent and underexplored in conversation analysis and related domains of inquiry (Roberts, 2004; Tannen, 2004), even though it has attracted a good deal of attention in psychology and other fields (e.g., McCardle, McCune, Griffin & Maholmes, 2011). Based on a large corpus of naturally occurring interaction in Japanese family homes with a two-year old child, it focuses on one episode (6 minutes) involving a mother and two children caring for a pet hamster. It shows how the mother verbally and non-verbally instructs the children in how to care for the pet (e.g., feeding, holding it), and how the children respond. In addition to examining the turn-by-turn instruction-response sequences, the paper will discuss the socio-cultural meanings potentially conveyed in the instruction, and it will also consider children as agents in this process who actively take up, and resist, acts of instruction.

PAPER2: Hiromichi Hosoma

Title: Gesture generating "rule": multi-modal activities in card game

Baba-nuki, a variant of "Old maid", is a popular card game in Japan. Although the rule of the game seems to be simple enough to understand even for children, adults can lose the rule especially in 2 moments of the game: when the game starts, and when one player discards all of his/her card to leave the game. We observed the process of 4 players' baba-nuki in 11 groups to analyze the interactive process in which the players seek to find out their options. In these process, the player express their interpretation each other to produce the rule interactively for each case, not only with their utterances but also their body movements: the slight change of the posture, gaze shifts, and the hand movements

with cards or without cards. We'll discuss the time structure of the players' conversations and multi-modal activities to achieve their practice of interpretation in baba-nuki.

DATA SESSION1: Oskar Lindwall

Title: Corrections and embodied demonstrations of instrumental actions

In a project that investigates the teaching and learning of manual skills, we have collected hundreds of sequences where: a) an expert shows a novice how a particular action, activity or technique is carried out; b) the novice attempts to do what the expert shows; and c) the expert corrects the conduct of the novice. A central aim of the project is to investigate the instructional and interactional organization of these sequences – including whether and how the traditional topics of conversation analysis (action formation, sequence organization, repair, etc) are relevant to the investigated sequences. In the data session, a video recorded sequence of textile craft instruction will be shown. In the sequence, the expert shows how a certain technique should be carried out and then uses the subsequent attempts of the novice as a basis for a series of instructive corrections.

PAPER3: Mika Enomoto

Title: Interactiveness, concurrency, and situatedness in achieving the preparatory conditions of "commanding"

In this presentation I reconsider the speech act theory based on analyses of "commanding" utterances used by the leader of a group working together to drag big trees out of a crest. My field involves 1) a large number of actors participating in the activity, 2) a huge object manipulated in a huge space, and 3) physical actions performed in real time. These characteristics require some conditions that are to be met for a "commanding" are tightly connected to the prerequisites of physical action that the commander request the hearers to perform. I also demonstrate how there preparatory conditions are achieved interactively, concurrently, and in a situation-dependent fashion through multi-party collaborative interaction.

PAPER4: Chiho Sunakawa

Title: Instruction and instructed actions: learning to become an orchestral conductor

The goal of this paper is to analyze how instruction and instructed action are organized in talk between orchestral conductors. Focusing on the relationship between instruction and instructed action (e.g. Garfinkel 1967, Suchman 1987, Mondada 2014), I specifically investigate how the expert's instruction of the body-sound coordination in conductors' skills and the novices' interpretation of the instruction are formulated in the multimodal courses of interaction. Through turn-by-turn analyses of video-recorded interactions between conductors in a university class, I describe how conductors identify problematic performances, engage in corrections, and communicate musical ideas in order to acquire professional body movements.

Conductors do not play notes by themselves, but provide professionally established hand movements to instrument players who produce actual musical sounds. This inextricable and synchronic relation between the conductor's hand movements and the production of sound is an integral part of conductors' skills to which instrument players must be oriented to achieve a successful musical performance. This paper specifically analyzes how this body-sound synchronization is communicated in the form of instruction and instructed actions.

LECTURE2: Lorenza Mondada

Title: Instructing a pilot driving on a race circuit

This talk focuses on a specific activity in which instructions are central: a driver and his coach are training on the race circuit of the Nürburgring (Germany). This circuit, open since 1927, is famous for historical races in different categories of cars; it is also one of the longest and most technical circuits in the world. The activity of driving, in this setting consists in adopting the best trajectory for the car, in a way that optimizes both safety and speed.

In this context, the training session contains innumerable instructions. These take a format that is shaped by the temporal conditions of the specific driving move the participants are engaged in at that precise moment, orienting to the right thing to be done *now*. This generates turns that favour brief verbal or nominal formats (imperatives like *steer*, names like *brake*, as well as deictic expressions like *left)* alternating with other turns that use the present and are syntactically more developed (*you steer at the tree over there*) and therefore take more time. The analysis deals with the way in which the instruction is formatted; the

instructed action is observably achieved (raising interesting methodological issues about how to observe, to demonstrate and to transcribe it); the indexicality of the instruction and possible problems raised by its brevity; and the fact that often these instructions are issued in series (for example series of imperatives, like *brake, and steer, and counter-steer*), referring not only to single actions but to routines to be acquired. This peculiar training situation reveals more general temporal and praxeological features characterising instructions/instructed actions in contexts in which the instructed action has to be done now.

PAPER5: Eric Hauser

Title: Monitoring an instructed action and projection of the next instruction through gaze shift

The data for this presentation come from video-recorded oral English tests at a university in Japan. In these tests, each student instructs the teacher in English on how to construct a geometric figure using a compass and a straightedge, with the teacher attempting to follow the instructions. The interaction consists of several instruction/instructed action adjacency pairs. The student and teacher are seated at a table facing each other, so it is possible for the student to monitor how the teacher is following his or her instructions. Occasionally, a student will correct the teacher's instructed action, but for the majority of instruction/instructed action adjacency pairs, this does not happen and the participants either move on to the next adjacency pair or finish the test. This presentation will analyze student monitoring and how gaze shift is used, possibly in conjunction with other resources, to project the next instruction.

PAPER6: Satomi Kuroshima

Title: Monitoring for instructions: Temporal organization of giving an instruction in a distance-learning system

This paper examines how the action of giving an instruction is designed in a way which reflects the instructor's 'monitoring' the recipient's performing of the instructed actions in an endoscopic paranasal sinus surgery training session. A distance-learning system equipped with surgical instruments, a nasal model and four monitors which display the

trainee and a trainer endoscopic view and the images of both participants enables them to instruct the operation 'online', while operating on the actual patient. The simultaneity of two participants' activities makes it possible for the training doctor to not only demonstrate their operations, but also monitor and temporally coordinate with the trainee's actions, which are embodied in their constructing a turn. Such actions of instructing are produced via linguistic adjustment (i.e., verb forms of predicates), pausing and halting their completion of a turn, and closely monitoring the trainee's implementing of the instructed operation.

DATA SESSION2: David Aline

Title: Instructed actions in Japanese elementary school English activities classes

The data under scrutiny for this session consists of a single lesson drawn from a corpus of Japanese elementary school English Activities classes. Within this institutional (more specifically educational/instructional) context, English is being taught through teacher-embodied actions, in that the teaching method is based on physical actions, onto which the target language is mapped and hopefully acquired. The teacher first sets up, through embodied demonstrations, actions that students need to imitate to demonstrate that those actions can be adequately performed prior to initiation of the activities themselves: singing songs and performing dialogs. The teacher's embodied demonstration continues during the learning activity as the students make evident, through speech and embodied actions, their understanding of the language learning activities. Unlike in other embodied instructional settings examined in this seminar, this context requires the learner to employ embodied actions as a basis for acquisition of the language of instruction.

DATA SESSION3: Kaoru Hayano

The data examined in this session comes from a private tea ceremony, where an instructor gives a casual lesson on basics of tea ceremony to three students. The focus will be on the segment in which the students learn how to use a cloth in the ceremony — how to fold it, unfold it, use it to clean the instruments, etc. The teaching/ learning process involves a complex configuration of bodies of the participants and the instruments. In particular, when the instructor gives a model performance that the students are supposed to follow on the

spot, we can witness various ways in which bodies, referential practices and the instruments are deployed. The session will aim at how learning is achieved through such multimodal interactional processes.

PAPER7: Domenic Berducci

Title: Interactional (non-instructional) training of human infants into sociality

My presentation outlines my ongoing research project, 'Infants from reacting to understanding', and consists of three parts. First, I detail my project's assumptions; next background the CA concept of turn-taking (TT) for the general Shonan audience; then finally present empirical arguments taken from various infant/caregiver interaction data sets, e.g. infants': Spitting up, eating, crying; to demonstrate conversational analytic evidence for my main claim: Infants' biological abilities ground sociality, insofar as sociality is constituted by turn-taking. Such capacities ground TT insofar as they occur in interaction with adults and are responded to by same, and thus these capacities are inadvertently embedded in a pre-existent TT system. It is also my contention here that infants cannot be instructed, rather they can only be trained in sociality (and other skills), supporting my assumption that cognition in any form need not be invoked as ground for sociality.

PAPER8: Eiko Yasui

Title: On an instruction involving a language translation at a Japanese traditional dance session: Collaboration between the instructor and interpreter

This study deals with an introductory session of Japanese traditional dance (Nihon Buyoo) at a Japanese university. The session is given to international students with limited Japanese proficiency and involves a Japanese to English translation of the instructions by a student interpreter. The instructions in this session, therefore, are delivered through two steps: the students first see the instructor's demonstration and then are provided with the verbal explanation given by the interpreter. This study thus examines how the instructions are done collaboratively by an instructor and interpreter. I discuss (1) the sequential process of instructions; how the demonstration and explanation are first done by the instructor

through verbal and nonverbal means and how the interpreter translates and delivers the instruction next, as well as (2) the simultaneous process of instructions, namely, how the instructor and interpreter adjust their behaviors to each other's actions in order to complement to each other's instructions.

PAPER9: Mayumi Bono

Title: Indirect instruction: How the director, engineer, and actors jointly construct conversation on the stage

In 2008, the Seinendan Theater Company and Osaka University began the Robot/Android–Human Theater project, a new project involving a fusion of theater arts and science. We are conducting fieldwork based on recordings, dating from January 2012, of the group's rehearsals and engineering practices on location at four stages. By observing how conversational sequences are created on the stage, in this paper we explore how the director, the actors and the engineer jointly construct conversation with a social robot.

From a technical standpoint, because all of the lines and embodied actions of the robot were recorded in advance, the director and actors use rehearsals to construct appropriate temporal relations pertaining to the robot's actions. We collected some of the director's indirect instructions and the actors' reactions and resulting actions in this setting. Based on our observations of these cases, we analyze how such indirect instruction works to create a naturally-occurring conversation on the stage. As a result of these observations, we anticipate that it will be possible to identify the segments of conversational sequences and embodied actions that are relevant not only for artists but also for the audience's involvement in performing arts. Our findings illustrate the kinds of actions in ordinary conversation that are pertinent for social order in general.

LECTURE3: Aug Nishizaka

Title: Normative orientations in sentential construction of procedural instructions in massage therapy

This study draws on video recordings of 12 massage therapy sessions. During massage therapy sessions, therapists produce instructions regarding massaging procedures. This study investigates the ways in which such procedural instructions are sententially

constructed in sequential and bodily configurations in interaction. Two observations are made. First, the more context-dependent, less explicit forms are more favorable than the more context-independent, more explicit form, i.e., the request form, in the construction of an instruction for clients to do a certain exercise. Second, the request form is commonly used for instructions for the clients to prepare their body for the therapists' next or incipient activity. The construction of procedural instructions is normatively sensitive to the sequential context in which the instructions occur.

DATA SESSION4: Akira Takada

Title: Language socialization and shaming in Japanese caregiver-child interactions

Studies of language socialization have examined the everyday interactions through which children are socialized into a socio-culturally structured universe. From this perspective, affect is both an organizing force and a product of socialization practices across various communities. Among other affective experiences, shame has attracted considerable attention in previous works. In this data session, inspired by those works, I focus on utterances that contained 'shameful' (hazukashii) made in interactions between Japanese caregivers and young children. Such utterances often appeared when caregivers noticed actions by children as inappropriate (e.g., overly childish) or when they assessed actions by children as inappropriate. Relative to other negative assessments that directly mark the speaker's intentionality, utterances that contain 'shameful' are less threatening in terms of face in Japanese conversation and thus useful in teasing children or eliciting desired responses from children. They also facilitate a multiplicity of frames in conversation between children and caregivers.

DATA SESSION5: Ayami Joh

This data session focuses on the practices of how science communicators' (SCs) instructing visitors to see some materials in exhibition areas at a national science museum contributes to accomplish social actions. This museum exhibits various materials for visitors to experience science and technology. I have collected the data fragments in which SCs instruct visitors to see a large round panel of galaxies, which represents the actual size of a mirror of Subaru telescope with a diameter of eight meters. With the instructions, some materials hardly recognized what they represent at once by visitors can become relevant resources for

1) topicalizing the material in the first contact between SCs and visitors, and 2) visitors' noticing with regard to science and technology through the instructions. Analyzing such practices will contribute to the studies on how the instruction of seeing leads to accomplishing social actions (Goodwin, 1994; 2000, Nishizaka, 2008; 2014).