

Communication Across Sensorial Divides – A Proposed Community Sourced Corpus of Everyday Interaction between Deaf Signers and Hearing Nonsigners

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Abstract

While research on conversation in signed and spoken languages has been flourishing, research on their intersection is scarce. This paper presents an ongoing project that gathers and analyses video data from deaf people's everyday interaction with hearing nonsigners and considers possibilities of involving the communication community that is at its centre and participant empowerment. The scope is to investigate the organisation and structure of communication in which linguistic resources are less accessible and in which social meaning tends to emerge from the interactants' online analysis of the local context (e.g., spatial environment, bodily configurations and movement of the interactants).

Keywords: deaf-hearing interaction, semiotic repertoire, conversation analysis, visible behaviour

1. Introduction

In this paper I present an overview of my research project entitled "A visual ethnography of everyday interaction between deaf signers and hearing nonsigners in Berlin and Tokyo" and contains reflections on ways of involving and empowering those who are at the centre of this research. I hold that the analysis of deaf-hearing interaction offers a great deal of insight into the formation of communicative systems and the emergence and attribution of context-sensitive meaning to bodily visible behaviour. I will furthermore present reflections about this type of communication before going into the matter of how the communication community in question can best be defined and described and how their involvement can contribute to insightful research outcomes.

2. Background

The past decades have seen a rising interest in the lived realities of deaf people. A great deal of research within this sphere focusses on sign language as the main communicative means. This has generated a substantial corpus of studies that are informative of linguistic and communicative features of sign language use. Deaf people, however, predominantly live in societies where spoken languages (both in vocal/oral and written form) are used and where familiarity with sign languages is scarce. For deaf signers, thus, communicating with hearing people who are not familiar with sign language (henceforth hearing nonsigners) is a daily routine, for example in customer interaction.

Interaction between deaf signers and hearing nonsigners (henceforth deaf-hearing interaction) is to date an understudied locus of communication (cf. Kusters, 2017), perhaps because this type of interaction may seem less structured and more improvised compared to forms of communication that primarily employ highly conventionalised, linguistic systems. This research will aid filling this perceptual gap and maintains that gestural/visual communication, regardless of whether it is considered linguistic or not, are orderly occurring forms of communication.

This project is a natural outgrowth of my PhD dissertation (Cibulka 2016) where I studied interactionally relevant phases of manual movement (e.g., hold, retraction and home position) in both signed (in Swedish Sign

Language) and spoken conversation (in Japanese, German and Swedish). The upshot was that participants in interaction employ manual movement and nonmovement in accordance with the sequential organisation of the talk, such as signalling imminent speakership, waiting for and acknowledging a reply. Participants do this unrelated to language modalities (i.e. regardless of whether the language used is signed or spoken), to language family and to geographic location (e.g., Sweden, Japan), suggesting a possible universal within human interaction.

3. The Project

My post-doctoral research project is being funded by the Swedish Research Council between 2018 and 2020.

A central premise of the project is that in deaf-hearing interaction both deaf signers and hearing nonsigners are equally creating the progression of interaction by employing their respective communicative repertoires. Since deaf people are encountering this interaction more frequently, they tend to be more of an expert: The communicative repertoires employed by deaf people are a skill acquired through regular contact with hearing nonsigners. Such repertoires contain resources that may be linguistic or nonlinguistic and may be part of one out of several modalities. For this reason, I favour the term *semiotic* repertoire (Kusters, Spotti, Swanwick, & Tapio, 2017) over *linguistic* repertoire. These are developed in deaf interactants through accumulation of interpersonal experiences in their life trajectories (Blommaert & Backus, 2013) and reflect a set of practices that typically and regularly prove successful in interaction with hearing nonsigners.

3.1 Scope

My research interest lies within the emergence of (interactional/social) meaning and the diversity of multilingual and multimodal practices. I intend to look at deaf-hearing interaction with the following questions in mind:

(1) Etic perspective

How much diversity is there in terms of semiotic repertoires with regard to the range of communicative situations? What kind of resources (linguistic and nonlinguistic) are routinely being mobilised for meaning-making and what kind of resources are conferred meaning

to on the spot, especially with regard to the interactants' diverse cultural and linguistic background (in Berlin and Tokyo respectively).

(2) Emic perspective

How do deaf and hearing interactants themselves characterise this type of interaction? To what extent does the interactants' previous exposure to semiotic diversity (e.g., exposure to signed/spoken languages) play a role? How is such interaction socially organised (e.g. in terms of turn-taking) and to what extent do its features overlap with those of other forms of interaction (e.g., purely spoken, purely signed)?

As a whole, this project contributes to recognising and presenting human diversity by highlighting the lived realities of participants in deaf-hearing interaction. It also encourages to think about and to revise traditional concepts of communication, language, sign and gesture, and it contributes to what has been called "comparative semiotics of kinesic expression" (Kendon, 2008). That is, a method of semiotic analysis that does not make an *a priori* distinction whether a given segment of behaviour is sign/gesture, verbal/nonverbal or part of signed/spoken language.

Furthermore, deaf-hearing interaction is apt to exhibit a lesser extent of linguistic resources, compared to interaction between deaf singers or between hearing people with a common language. As such, it offers a less pre-structured and defined array of semiotic typification. If communication in general is to be understood as an embodied experience, this project aids in shedding light at its embodied nature, when linguistic resources are less available.

3.2 Data Collection

Data collection will consist of (1) a pre-structured survey asking the deaf participants about their communicative habits, degree of exposure to signed and spoken languages and other relevant ethnographic background; and (2) video recordings of the deaf participants' daily routines when interacting with hearing nonsigners. My initial idea was to gather these recordings in nonparticipatory observation, i.e. filming without being a (ratified) participant in the interaction myself. I share my reflexions as to how these data could best be gathered in a dedicated section below.

3.3 Analysis

The two types of data will be analysed in two ways: (1) analysis of semiotic repertoires and (2) analysis of action formation and sequential organisation of the interactions with such semiotic repertoires in place. The analysis in (1) is categorical, i.e. I will identify the range of semiotic repertoires in deaf and hearing interactants and associate them with the participants individual background and the larger context (e.g., spatial environment) in which the interaction occurs. The analysis in (2) is structural, i.e. I will examine the micro-context of semiotic repertoires in a conversation/context analytic (Kendon, 1990, 2004; Schegloff, 2007) fashion. The aim of this analysis is to investigate the sequential organisation of deaf-hearing interaction specifically and how it compares to other types of interaction. See Figure 1 for the study design.

Compared to (purely) signed, spoken or written interaction where interactants may draw from a large pool of conventionalised linguistic resources, interactants in deaf-hearing have a more limited (and more embodied)

set of readily deployable communicative resources at their disposal. This leads to a more versatile use of resources (such as objects in the surround or the spatial environment itself; cf. Pennycook and Otsuji [2014]) as social practices. This research is significant, because, as such, offers a novel perspective on the emergence and negotiation of meaning and on the dynamics of meaning-making in human interaction in general.

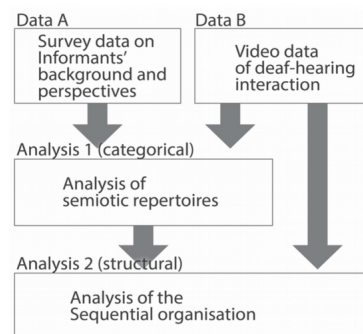


Figure 1: Data and analysis in the project

4. Preliminary Analysis

Some limited amount of data of deaf-hearing interaction were taken at a restaurant in Tokyo (Japan) in 2014 and at a café in Gothenburg (Sweden) in 2016 respectively. In order to give a rough picture of the kind of data that is to be expected, I will illustrate some features of such interaction by presenting two instances of deaf-hearing customer interaction. In both instances we find interactional sequences (namely ordering sequences) that are typical of the respective environment and that are recognised as such, but the resources that participants mobilise are more diverse compared to hearing-hearing interaction.

In the first instance, a deaf customer (C), who is seated at a restaurant table, calls the waiter (W) and checks the availability of a specific dish before ordering. The key frames of this instance are arranged in Figure 2. The duration from the first to the last frame is about 20 seconds. As a general observation, the social relationship between the interactants is established, among others, by virtue of participant mobility: standing-mobile for W vs. steady-seated for C (i.e. a kind of spatial repertoire; described under heading 5). The interaction unfolds within the framework of this social arrangement. C establishes reciprocity with W by tapping the wall (creating an audio cue; 2-1) and hand-waving (2-2). When W arrives, C establishes focus on two objects by repeatedly pointing at the notebook screen showing a picture of a dish and at the menu. This way, C establishes a frame for the common activity of identifying an item with the notebook at C's and the menu as W's field of expertise. W engages in this activity by pointing at an item in the menu and gazing to C (2-3). C retracts their hand and creates a hand shape recognisable as OK-sign (2-4). This is a typical slot for placing an order, so the ordering of the item is being entailed by its sequential implicativeness of the micro-context. C then points at the notebook screen again, presumably showing another picture and shifts gaze to W (2-5). W gives a negative response. The sequence is closed by C smiling, shifting

gaze back to the notebook and changing its orientation away from W (2-6), who shows their understanding of sequence closure by subsequently walking off.



Figure 2: Ordering sequence at a restaurant

A second instance is provided in Figure 3. A deaf participant is standing in line at a café counter where drinks and meals are ordered, served and paid. The social relationship between the interactants is established by their spatial configuration, where the customer (C) stands in front of the counter and the waiter (W) behind it. The ordering sequence is initiated through C standing in line until W establishes reciprocity through eye contact.

In 3-1 C points at a stack of cookies in the back while saying "I want a cookie" in Swedish. W walks towards the stack of cookies, points at it while gazing towards C who nods (3-2). C also orders coffee by saying "coffee" in Swedish (not reflected in the figure). When C presents a banknote, W at first uses vocal resources (3-3) saying that only card payment is accepted. C leans forward and thereby initiates repair (3-4). In response, W points to the card reader (3-5). Understanding is reassured by C by again presenting the banknote while gazing at W who responds with a head-shake and a lateral hand movement (3-6). C displays their understanding by putting the banknote back into the wallet and pulling out a credit card.

Participants thus create focus on objects making relevant specific social actions within the frames provided by the spatial context (e.g., restaurant, queue at the counter) and on basis of known, regularly occurring sequences (e.g., ordering sequences). Taking into account such frames when unpacking social actions is crucial, especially for deaf-hearing interaction, because such frames make relevant and constrict the unfolding of certain interactional trajectories. It is also interesting to examine the kind of resources mobilised by both deaf and hearing participants. For example, C in the second instance mobilises vocal (spoken Swedish) resources on some

occasions, whereas in the first instance C relies on auditory (tapping the wall) and visual resources.



Figure 3: Ordering sequence at a café

5. Language Community

With the overall aims and the general procedure of my project in mind, a rather crucial aspect is who gets to participate. The procedure is rather straightforward for corpora that aim at collecting data in a specific language, as it suffices to recruit participants who are fluent in a given language to the required extent. Deaf-hearing interaction, however, is an intersectional phenomenon; localising the relevant community/communities and defining the focus is a multi-faceted issue.

To begin with, the various repertoires employed in deaf-hearing interaction are not necessarily made up of what formally counts as language: It would be disputable to refer to the communicative system in this type of interaction as "common language" or "lingua franca" between deaf signers and hearing nonsigners. There is thus no communication community for this type of interaction that can readily be called "typical". It is rather described as an intersection between the individual semiotic repertoires of different individuals with asymmetric sensorial access. The very existence of this type of interaction is attributed to the fact that individuals have varying degrees of access to the senses, and that this has an impact on what kind semiotic resources lead to mutual understanding.

Indeed, any type of social interaction can be regarded in terms of an overlap between the participants' semiotic repertoires. In the case of deaf signers and hearing nonsigners this overlap is rather small, when compared to, for instance, that of two fluent signers with a common language. Both interactants do, however, have access to the visual world within reach and understand the contingencies and affordances of the spatial environment in which their bodies are contained, i.e. they have spatial

repertoires that may be employed in interaction (see Figure 4).

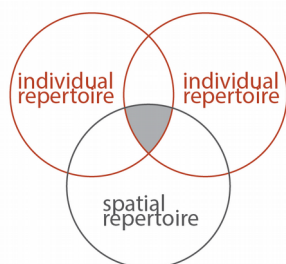


Figure 4: Overlapping individual and spatial repertoires

What is central for my purposes is the way social meaning is made relevant, negotiated and constructed with such individual and spatial repertoires in place, because it requires all parties to act outside the sphere of, foremost linguistic, conventions and dive into a communication of more trial-and-error in order to agree on meaning and thus create conventions and norms that work in the given setting in favour for a shared interactional outcome.

In order to do so, both parties are required to adapt: Deaf interactants may adapt their manual and bodily movement in a way that is understandable to a nonsigner and hearing interactants may adapt their signs/gestures and/or spoken language in a way that is understandable to a deaf person. Deaf people's lived realities are often embedded in a culturally hearing environment. Thus deaf people may be used to assessing and flexibly adapting to various semiotic resources both in the interlocutor and within the physical surrounds to a higher degree than hearing people who routinely use spoken language (cf. Kusters, 2017).

The ability to assess the kinds of semiotic resource that prove successful in a given interaction is part of deaf people's everyday lives. I regard this an acquired skill and thus an important cornerstone of Deaf epistemology that sit at the intersection of socioculturally hearing epistemologies.

The self-identification of a participant as deaf, hard of hearing, and/or Deaf etc. may be a relevant factor. Broadly speaking, *Deaf* and *Hearing* (uppercase 'D' and 'H') designate cultural, whereas *deaf* and *hearing* (lowercase 'd' and 'h') medical aspects of lived realities related to one's hearing status. The former is a personal choice and way of looking at oneself, the latter is an ascription from a third party.¹

This study, is neither primarily concerned with cultural aspects of being D/deaf *per se*, nor with cultural aspects of being H/hearing *per se*. The research interest is located within the sphere of sociocultural and communicative diversity that emerges at the intersection of sensorial divides. However, it is important to keep track of the participants' self-identification, since it may offer valuable clues on the choice of semiotic practices. For instance, a deaf participant identifying as culturally Deaf may rely on primarily visible resources, whereas a deaf participant identifying as culturally Hearing may rely on primarily vocal resources.

¹For a detailed account on D/deaf identities see Padden and Humphries (2006) and Kusters, De Meulder, and O'Brien (2017). See McIlroy and Storbeck (2011) for a discussion on what is called biculturally Deaf identities (i.e. both Deaf and Hearing to some extent).

It has been noted that hearing scholars' epistemological grounds have largely remained undiscussed and that a "productive, (de)constructive exploration of the place of Hearing people within Deaf Studies has yet to occur" (Sutton-Spence & West, 2011). In the light of this discussion it is relevant to clarify my own role as a hearing person who identifies as (culturally) Hearing. I have been in in contact with deaf signers (mainly in academic contexts) and I am somewhat able to hold a conversation in Swedish Sign Language and to a lesser extent in Japanese Sign Language. This research project is thus an opportunity to put my own background as a hearing person into the equation by scrutinising and presenting the various ways of communication between myself and deaf collaborators.

6. Community Sourcing

A great deal of interaction at shops other service-related businesses happens using spoken languages. This circumstance puts deaf people into the position of being the driving force of deaf-hearing communication in customer interaction. Research into deaf-hearing interaction thus relies on accounts from individuals who feel ostracised from certain life domains because of their hearing status and on video data from this interaction.

The initial idea was that I – as a researcher – conduct fieldwork through following deaf participants through their daily routines in nonparticipatory observation when they interact with hearing individuals. This would give me control over what to record, where to put the focus etc, but on the other hand I would obtain video data that is shaped by my own expectations towards the interaction. An alternative is to leave filming to the participants themselves, as collaborators, and let them decide what, when, how long to film and what phenomena to focus on, i.e. as *participatory* video study.

Researchers observe, analyse and/or represent the lives of others and as such run risk of (re)producing a power relationship with the participants that has been described as "possibly exploitative" (Cunliffe and Karunanayake, 2013). The categories of "researcher" and "researched" are socially constructed roles that may be enacted and reproduced in a variety of ways (Whiting, Symon, Roby, and Chamakiotis, 2016). A part of the research tasks that hitherto have been associated with researchers can be transferred onto the participants. This puts them into a role of co-designers of the research subject and process, and it will be more evident what aspects are most central and important to deaf interactants in a society in which the majority are nonsigners.

This way, at least two layers of data can be obtained: (1) recordings of deaf-hearing interaction itself and (2) the frame that the filming participants produce, i.e. what kind of interactions are being filmed and what is important to interactants.

An excellent example for this type of research approach is the work by Kusters (2015, 2017) on encounters between deaf and hearing people in Mumbai. Filming was done in shops and market places by a team that itself consisted of deaf members. Furthermore, the recordings served as a basis for a full-fledged documentary film, entitled "Ishaare – Gestures and Signs in Mumbai" (Kusters 2015). It contains subtitled interactions, interviews with the deaf protagonists and the shopkeepers. The data from

such a large-scale project can be recycled and analysed from a multitude of perspectives: interactional analysis of deaf-hearing encounters; analysis of the way the filming crew orients towards the filming technology and determines the focus of the encounter; reactions from the audience on the film at a screening event, to name a few.

This research frame of participant-based data elicitation contributes to questioning the power relationship between researcher and participant and provides opportunities of participant empowerment.

Digital recording technology has made video making possible for nonprofessionals. The widespread use of smartphones, specifically, enables a great number of individuals to turn a mundane, everyday setting into potential research data, just by tapping the record button. Providing a video camera, a cameraperson and controlled conditions become a less relevant issue for a researcher. What is crucial is to recruit individuals who are willing to register as participants in the project and to put them at the centre. This entails that they are willing to videotape everyday interaction between deaf people and hearing non-signers and/or to have their own interaction with hearing non-signers recorded. Participants are thus assigned both a passive and active role; passive in that their communication is object of enquiry and active in that they are given a free hand over data elicitation and production: the choice over the place, point in time, focus, length of the recording is up to the participants.

For a small-scale pilot project, a website will be set up with information about the background, purposes and procedures about the research project. This will include a registration form for participants, suggestions on how to record and how the data can be transferred. Participants may also categorise, use tags or comment functions to enrich the resulting data; analysis will be a joint process in which participants highlight and/or label phenomena that they ascribe meaning to.

A question that is to be discussed is about procuring the participants' informed consent. This is especially important when collaborators produce video data in public and semi-public spaces such as shops. This is an obstacle because a participant's consent should be obtained before the recording, but on the other hand this task can be documented and studied as a social phenomenon in itself, thus producing another layer of data. That is, both the discussion among collaborators about ways of obtaining informed consent from shopkeepers and the actual outcome of how consent was obtained can be considered valid and central topics of discourse.

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