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**Title:** “Do you understand (me)?” negotiating mutual understanding by using gaze and environmentally coupled gestures between two deaf signing participants

**Year:** 2022

**Version:** Published version

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**Please cite the original version:**

Sivunen, N., & Tapio, E. (2022). “Do you understand (me)?” negotiating mutual understanding by using gaze and environmentally coupled gestures between two deaf signing participants. *Applied Linguistics Review*, 13(6), 983-1004. <https://doi.org/10.1515/applirev-2019-0065>

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# “Do you understand (me)?” negotiating mutual understanding by using gaze and environmentally coupled gestures between two deaf signing participants

<https://doi.org/10.1515/applirev-2019-0065>

**Abstract:** In this paper we explore the use of multimodal and multilingual semiotic resources in interactions between two deaf signing participants, a researcher and an asylum seeker. The focus is on the use of gaze and environmentally coupled gestures. Drawing on multimodal analysis and linguistic ethnography, we demonstrate how gaze and environmentally coupled gestures are effective semiotic resources for reaching mutual understanding. The study provides insight into the challenges and opportunities (deaf) asylum seekers, researchers, and employees of reception centres or the state may encounter because of the asymmetrical language competencies. Our concern is that such asymmetrical situations may be created and maintained by ignoring visual and embodied resources in interaction and, in the case of deaf asylum seekers, by unrealistic expectations towards conventionalized forms of international sign.

**Keywords:** multimodal interaction, meaning-making, mutual understanding, asymmetrical interaction, deaf

## 1 Introduction

In this paper we explore the use of multimodal and multilingual semiotic resources in interactions between deaf, signing participants, a researcher and an asylum seeker. The data comes from a research interview which is part of a larger ethnographic research project on deaf asylum seekers and their experiences in the asylum procedure in Finland (Sivunen 2019). Sivunen, the first author of this paper, interviewed

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10 deaf asylum seekers between the years 2015 and 2017. When designing the interviews, she acknowledged how the communication may be challenging and problematic for both her and the interviewees: at the time of the interviews the deaf research participants might not master the sign and/or written languages used in Finland, and she, a deaf multilingual Finnish Sign Language (henceforth FinSL) signer, might not master the sign and/or written languages the research participants have in their repertoire. As part of the solution, she planned to conduct the interviews in the communication method known as international sign (henceforth IS). IS has been described as a highly variable phenomenon, a form of communication between deaf people who do not have a shared sign language; it covers signing practices ranging from conventionalized forms, typically seen at international deaf conference presentations (Whynot 2016), to any ad hoc communication between signers (Green 2015, Hiddinga and Crasborn 2011, Rosenstock and Napier 2016).

As the interviews proceeded, Sivunen became acutely aware of the problem in linguistic asymmetrical interaction: The type of IS she was experienced with, one with a rather conventional set of vocabulary, was not adequate for research interviews between her and the research participants. However, some mutual understanding was achieved, and as a researcher, she did gain answers for her questions through the interviews. This observation led us to examine in detail the semiotic resources used in the interviews. For this, one interview was selected for closer analysis.

Our aim is to unpack and demonstrate the ways in which the interviewing researcher and the interviewee, who share only a few signs of named languages such as FinSL and Arab Sign deploy their communication resources in exceptionally challenging circumstances. For this, we have taken a holistic approach to the interactions under scrutiny: the analysis attends to the use of visual and embodied semiotic resources such as gaze and gesturing, the use of signed languages and the affordances provided by the immediate context wherein the interaction takes place. While the analysis investigates the use of semiotic resources, in general, particular attention will be paid to gaze and *environmentally coupled gestures*, the gestures that cannot be understood without taking into account the phenomena in the environment they are tied to (Goodwin 2007), and the ways that the participants design their turns with the aim of constructing mutual understanding in interaction where the participants share limited linguistic resources. The article aims to answer the following research question: how do participants use gaze and environmentally coupled gestures for meaning-making?

Our motivation for this study is a need to demonstrate how the mutual understanding is achieved in the interviews where interaction builds much more on the shared context and knowledge than on the sharedness of languages (see Ortega 2019). This we do in order to argue for ethically sound interview techniques in Sivunen's research project. Further, we are increasingly concerned about the

possibilities the research participants have for stating the grounds for claiming asylum in the context of the official asylum interviews. Problems in mutual understanding can put to risk linguistic and human rights in the context of asylum process, particularly in the context of asylum interviews. This paper can provide insight into the challenges and opportunities (deaf) asylum seekers, researchers and employees of the reception centres or state may meet in interactions because of the asymmetrical language competencies. Through our study, we want to highlight the affordances the context provides for establishing mutual understanding when using both multimodal and multilingual resources.

The paper is structured as follows. First, we will state the key concepts and previous research on multimodal and asymmetrical interaction (section 2). The next Section (3) presents the data and the methodology of the study. The following Section (4) presents an analysis of three cases, with a focus on the use of gaze, environmentally coupled gestures, and the negotiating of understanding in interaction. We then present a concluding discussion (section 5) in which we will critically discuss the use of conventionalized IS as an assumed solution for communication with deaf asylum seekers.

## 2 Key concepts and previous research

### 2.1 Multimodal interaction and meaning-making

Human action is built through “the simultaneous deployment of a range of quite different kinds of semiotic resources” (Goodwin 2000: 1489); in other words, people employ different semiotic resources or communicative modes in their interaction. The simultaneous use of various semiotic resources has always been the norm in interaction (Streeck et al. 2011: 4; Bateman et al. 2017). How and which semiotic resources are used is determined by the situation, the social actors, their backgrounds, and other social and environmental factors (Norris 2004: 78–94).

*Semiotic resources* refer to the material and non-material means people use in their interaction for making meaning. The concept of *mode* or *communicative mode* – defined as organized sets of semiotic resources and regular means of representation – has traditionally been used when referring to representation, such as image, gesture or writing (Jewitt 2008: 246, 2004: 184; Kress and van Leeuwen 2001). In this article, we use the concept of semiotic resources to highlight that the form and function of resources used in analysed interaction are actually flexible and constantly negotiated, rather than being organized to the level of being defined as a mode.

Kress and Van Leeuwen (2001: 125–126) use gesture and sign language as an example of how a rather flexible and open meaning-making system, such as

gesture, may develop into a “full representational and communicational resource”; a highly regularized ensemble of semiotic resources. Sign language interaction challenges the dichotomization between linguistic versus non-linguistic, gesture versus signs (e.g. Liddell 2003, Tapio 2014). Furthermore, gestural utterances in the context of spoken language interaction may be socially shared and conventionalized to a degree that they may be comparable to lexical signs in a sign language (Kendon 2014).

When examining the interplay of different semiotic resources within interaction, the analyst soon realizes that semiotic resources, including languages, have no true boundaries, and are difficult to distinguish from each other (Norris 2004: 51). Despite the risk of missing crucial aspects of the complexity of semiotic resources and meaning-making, there is a methodological need to name modes (Bateman et al. 2017: 19-20), or in our case, semiotic resources.

These theoretical positions are applied when we are annotating and transcribing video data of interaction in which the success depends – as Ortega (2019) points out – more on the sharedness of knowledge and context than on the sharedness of languages (Ortega 2019: 29). For example, a manual gesture can be transcribed as a gesture or a FinSL sign depending on the research framework or the context the data is derived from. In our data, such elements emerge in highly multilingual, multimodal context. If we categorize such element (merely) as a FinSL sign we end up excluding the option of the element being something else – a less conventionalized gesture or an element from another linguistic category – from the perspective of the research participants (Messina Dahlberg and Bagga-Gupta 2019). In other words, transcribing elements as belonging to one linguistic category only can obscure the possibility that the participants in the analysed interaction draw from a mutually shared, “single, holistic semiotic repertoire” (Ortega 2019:31). On the other hand, as analysts we need to trace and make visible the trajectories of semiotic resources to socially constructed categories, such as named languages, if those categories are meaningful for the participants. This is often the case when people pursue competence in semiotic resources which is recognized by others as the skills of a named language, such as FinSL.

As a consequence, we have chosen to have only one category, “gesture/sign”, when annotating and transcribing visual-gestural elements in our data. The possible links to categories such as FinSL, Arab Sign or IS are given in the description whenever we have traced enough information through ethnographic data to do so. While interested in the interplay of all the semiotic resources used in the analysed interaction, this article focuses on the interplay between signed languages, gestures, and gaze and the ways the environment is interactively coupled to these modes. Goodwin (2007) has investigated the interplay of gesture, language and the environment in meaning-making. He calls the phenomena “environmentally coupled

gestures” (henceforth ECG). Similarly to language that can describe something absent, gestures can refer to absent and/or imagined phenomena in the environment, and actions in such environments (Hutchins and Nomura 2011). The participants need a shared understanding of both – the physical and the imagined environment the physical environment represents – in order to understand the ECG used in interactional situations. In sign language interaction, space around the signer has a special function: the blending of real space (i.e. the perceived physical space for the signer) with grammatically encoded semantic space and orienting signing to such *blended space* is a typical aspect of sign language grammar (Liddell 2003). In IS, gazing and pointing to objects in the immediate environment has been found to be a typical feature for establishing referents in discourse (McKee and Napier 2002).

## 2.2 Asymmetrical interaction

Asymmetry in interaction has been examined mostly in the context of institutional interaction (Heritage and Clayman 2010). The concept of asymmetry recognizes the ways semiotic resources and interactional practices in interaction are linked to different access people have to resources. Asymmetry may also refer to other resources, such as power and knowledge, for example, the right to determine action (Stevanovic 2016), or the asymmetry of emotional investment relevant to the situation between the participants in interaction (Heritage and Clayman 2010). Kusters (2017) recognizes *sensorial asymmetry* in interactions between deaf and hearing interlocutors who experience differences in access to semiotic resources that are available to them through different senses.

Leskelä and Lindholm (2012) have grouped the causes of linguistic asymmetry into three categories: weakened or impaired linguistic skills caused by, for example, aphasia; pursued linguistic skills; and congenital deviation in linguistic processing. From the perspective of linguistic asymmetry, the focus of this paper falls on the second category, in which the asymmetry is seen as caused by the limited, yet still pursued, language skills of the participants. However, asymmetry is a situational, dynamic, and negotiable feature in any communicative situation (Leskelä and Lindholm 2012: 16). While the limitation of language skills is usually defined with respect to the chosen language in the interactional situation under scrutiny, this paper attends to a situation where the idea of “the chosen language in the situation” can be questioned altogether.

We do not consider “skills” in languages or other semiotic resources as something that participants either have or lack, but “what the environment, as structured determination and interactional emergence, enables and disables them to deploy” (Blommaert et al. 2005: 213). Instead of approaching the individual’s competence from a monolingual or monomodal viewpoint, the competence can be

defined as an ability to “rapidly call upon alternative structures from a larger, ready at hand tool kit of diverse semiotic resources” (Goodwin 2000:1504) which are enabled by the (emerging) interactional space. As Tapio (2013) points out, this very same ability is also a sign of a successful language learner from an ecological view of language learning (e.g. Kramsch 2002); in other words, when examining an actor perceiving and acting upon affordances in a given environment. In sum, by examining micro-level interaction with ethnographic knowledge of the participants’ previous experiences with semiotic resources and the practices linked to them, one can shed light on what causes asymmetry in an interactional situation. For example, pointing out the assumptions of preferred linguistic varieties in a situation provides information on what can hinder the use of “alternative structures” or resources in the situation, while micro-level analysis based on empirical data shows how and by whom semiotic resources are deployed in an interaction.

Research findings on interpreter-mediated asylum interviews by Puumala et al. (2017) and Määttä (2015) highlight a bias towards written language and monolingual ideologies, which dominate communication in those interviews, impacting them negatively. Their research gives practical examples on how asymmetry in power causes limited access to visual and gestural semiotic resources.

### 3 Methodology and data

This study is part of Sivunen’s larger ethnographic research project on deaf asylum seekers and their experiences in the asylum procedure in Finland (Sivunen 2019). 10 research participants with an Arabic background from the Middle East were interviewed between 2015 and 2017. Each participant was interviewed at least once; seven participants twice and four participants had a third interview (See Sivunen 2019 for more detailed description of research participants and data collection). Out of the 14 interviews one interview was chosen for closer analysis in this paper.

A multimodal analysis informed by conversation analysis, CA (see e.g. Goodwin 2000, Mondada 2014, 2019), is used in this study to examine the ways in which the interviewer and the interviewee deploy semiotic resources – gaze and environmentally coupled gesture in particular – for reaching mutual understanding. A conversation analytical focus on the sequential process of meaning-making is necessary for reaching this goal. CA also offers us concise terminology, such as the concepts we use for describing a repair sequence in our analysis. Linguistic ethnography (e.g. Shaw et al. 2015; Copland and Creese 2015), on the other hand, provides us with the means of understanding context, in this case the asylum process and participants’ previous experiences with semiotic resources used in the analysed interaction. In other words, while detailed, multimodal analysis helps us

“zoom in” to examine the use of semiotic resources in one specific interview, ethnographic knowledge allows us to “zoom out” and locate our observations and research findings in the wider, social context. Combining linguistic and ethnographic approaches help us to understand how social and communicative processes work together in a range of contexts and settings (Shaw et al. 2015:1).

The data for this article comes from an individual interview with Ali, a male deaf asylum seeker, who was displaced alone as a deaf person to a reception centre and had very limited communication possibilities with the staff or other residents. He reported using only Arab Sign (for an explanation of using the term *Arab Sign*, see Sivunen 2019) and being an emergent reader in Arabic. The participant had received little formal education in his country of origin in the Middle East. He also never received FinSL instruction during his asylum procedure in Finland, even though taking part in both language training and work activities is obligatory for asylum seekers while residing in a reception centre.

The interviewer, Nina Sivunen, the first author of this paper, is a doctoral researcher with a bilingual education (in FinSL and Finnish) background. Sivunen knows several signed and written languages; she is also familiar with conventionalized IS. The participants in the analysed interaction do not share a common language to converse with in a fluent manner. As a consequence, the interview was carried out by mixing gestures, FinSL, Arab Sign, and a few conventionalized IS signs, such as DEAF, HEARING, and SCHOOL. Fingerspelling or writing was not used because of the different alphabet used by the interlocutors. At this point they had known each other for six months, met each other a few times before, and kept contact through video calls. The purpose of the interview was to find out Ali’s experiences of living and communicating in Finland and in his country of origin. The atmosphere during the interview at the reception centre was stressful, and Ali was in the middle of his asylum process.

The data used for this article consists of their second, 45-min interview in 2016. The interview was held and video-recorded in a large meeting room, with a camera placed about 2 m away in front of the participants who were sitting side by side at a round table (see figures in this paper). The meeting room contained many tables, chairs, some green plants, and large windows. The video-data was imported into the annotation tool ELAN (Crasborn and Sloetjes 2008, Max Planck Institute for Psycholinguistics, The Language Archive, Nijmegen, The Netherlands, see <https://tla.mpi.nl/tools/tla-tools/elan/>). The first author annotated the interview and translated it into written Finnish. Some signs were not understood, and therefore were not translated. 10 shorter signing units were chosen from the 45-min interview for deep systematic analysis. Seven tiers in ELAN were used for annotating the actions of each participant: sign/gesture, gaze, head movement, body posture, object handling, facial expression, and approximant translation in English. One



additional tier was reserved for analytical observations. After annotation, the shorter units were transferred to a table in Word. Both authors together continued analysis of the interaction in Word.

We have combined the most basic transcription conventions of conversation analysis (Jefferson 2004) with conventions from sign language linguistics (e.g. Johnston 2016) such as glossing<sup>1</sup> manual signs with small capitals (see Appendix). Manual gestures are also glossed in transcription, because we do not distinguish between gesture and discrete signs, but see them as elements of “one system” (McNeill 1992, see also Section 2.1). Pointing is marked as a gloss towards something, such as in PNT-table (e.g. Groeber and Pochon-Berger 2014); touching something is marked similarly, as in TCH-table. Other embodied resources such as gaze and facial expressions are marked on the line above the gloss. Those lines indicate approximately how long the action in question lasts. There are no specific categorizations of languages in the transcription (see Section 2.1). The interaction contains a large amount of simultaneous use of semiotic resources, so we use a partiture transcription<sup>2</sup> to show the complexity and multimodal density of interaction (Tapio 2013). Illustrations drawn from still pictures taken from the video are used to show the gaze and gesture of the participants. In illustration, some personal identifier markers are both removed and changed. The English translations are below each partiture transcription.

## 4 Analysis

### 4.1 Gesture and gaze as tied to the environment for meaning-making

When Ali and Nina did not share a lexical sign, they mixed different gestures and lexical signs. They used gaze and ECG for establishing the topic of conversation or negotiating a concept interactively. In the following example, Nina wants to find out whether Ali is participating in Finnish language classes at the reception centre, which is one of the activities the residents at the centre are obliged to take part in. The focus of the analysis is on how the concept of ‘reception centre’ is negotiated between Nina and Ali.

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1 Gloss means that the sign has been approximately translated to a spoken language word; most sign language research relies on this practice.

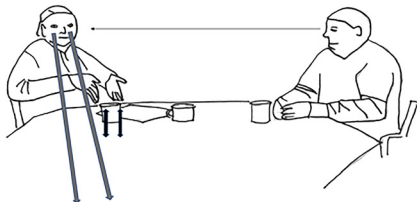
2 Partiture is used as a score in manuscript for music for showing each part on a separate line.

Example 1. *Reception centre*

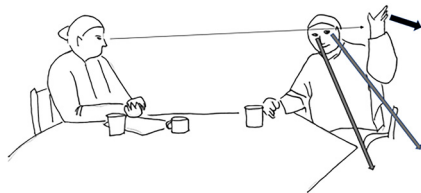
01 N	_____gaze to door	
	PNT-2 PNT-table PNT-2 PNT-table SLEEP HOME PNT-[table	
	fig. 1	
02 A		[micro-small hn
03 N	_____gaze to door	_____hs
	TEACH-YOU FINLAND WRIT[E PNT-2 (0.3)	raised eyebrow
04 A		[closes eyes micro-small hs
05 N	_____hn	_____hs
	HEARING MANY-GO PNT-2 NO [PNT-2	gaze to door raised eyebrow
06 A		_____hs
		[NO
07 N	micro-small hs	
	eyebrows down	
	shoulders up	
	PALMS-UP (0.4)	
08 A	_____gaze to door	_____gaze to door
	HEARING SCHOOL COUNTRY PNT-door	
09 N	[_hn	
10 A	look sign _____gaze to door look sign	
	TEACH SPEAK PNT-[door SCHOOL TEACH	
	fig. 2	

## Translation:

- 01 N: here at the reception centre
- 02 A: yes
- 03 N: do you participate in Finnish language teaching here (at the reception centre)?... You don't (right)?
- 04 A: (no ...)
- 05 N: Many hearing people here go to (study Finnish) but you don't (right)?
- 06 A: No.
- 07 N: Why (not)?
- 08 A: Hearing [country's citizens] go to school here
- 09 N: Yes
- 10 A: they (teachers) here teach by speaking



**Figure 1:** Gaze towards the door and pointing towards the table (line 01).



**Figure 2:** Gaze and pointing with a flat hand towards the door (line 10).

Nina begins to ask a question by looking and pointing at Ali. Then, she turns her head and gazes towards the door on the right side and simultaneously points with two index fingers downwards towards the table as for meaning 'here'. Next, she points at him again and points the second time with both palms towards the table (see Figure 1). Nina signs SLEEP and HOME, the later in Arab Sign. Her head and gaze are oriented to the right for 1.7 s in total. Next she returns to gaze at Ali and points with two index finger downwards for the third time (line 01). Ali overlaps and replies with micro-small head nods (line 02). Nina turns her gaze again back to the right, towards the door briefly, and simultaneously signs in FinSL TEACH-YOU by moving her hands twice forward from the direction of the door towards Ali. Next, she turns her gaze back to Ali and formulates a question 'Do you participate in Finnish language teaching here (at the reception centre)?' (line 03). Ali closes his eyes (line 4) during the sign WRITE, which is prolonged to last for 0.8 s by lengthening the movement phase of the sign (line 03). Nina finalises the question by pointing at Ali and simultaneously shaking her head with raised eyebrows. There is a 0.3 s pause (line 03) after which Ali responds with micro-small head shakes (line 04).

Nina does not interpret Ali's micro-small head shakes as an answer to her question, and revises her question and expands upon an example that refers to hearing residents who go to Finnish classes at the reception centre. She begins by turning her gaze again back to the right side, simultaneously using an affirmation nod (Puupponen et al. 2015) along with the sign HEARING, and then signs MANY-GO.

The last sign has the direction in signing space (see Engberg-Pedersen 2013) towards the door. Then, Nina directs her gaze back to Ali and points at him and signs NO with a question facial expression with raised eyebrows, and points again towards him, suggesting that he does not receive Finnish instruction at all (line 05).

Ali responds with a strong head shake and repeats Nina's sign NO (line 06). Now that Nina has received an answer to her question, she wants to know more, and asks 'why (not)' in a gestural way (line 07). Ali explains to Nina that the teacher teaches the hearing residents from his country of origin and the modality used in instruction is spoken language. In this, similarly to Nina, Ali motions towards the door: First, Ali turns his gaze to the left, towards the door. He then signs HEARING and glances at Nina briefly, then he turns his gaze back towards the door, signing simultaneously SCHOOL, COUNTRY (a sign of his country of origin), and points again towards the door with the whole palm (line 08). He then signs TEACH and directs his gaze towards his signing hands. He looks again back at Nina and signs SPEAK, and simultaneously turns his gaze back to the door, and points at the door with his whole arm (line 10, see Figure 2). He finishes his turn by

gazing back at Nina and repeats the signs SCHOOL and TEACH. In the analysed excerpt, Ali and Nina do not negotiate a sign with which to refer to the reception centre; it is referred to through gaze and ECG, both of which are directed towards the table ('here') or the door.

However, as stated by Goodwin (2003), pointing "is not a simple act", but can only succeed when both participants negotiate for shared understanding on the same thing (p. 218). Pointing may be a deictic gesture, which points to an object in the physical world (Norris 2004:28), but in this case pointing to the table (line 01) or to the door (line 08 and 10) is not about those objects in a concrete sense in the physical world. Using gaze and ECG as referring to the reception centre is repeatedly used; Nina points downwards to the table with the gaze to right towards door along with signs of SLEEP and HOME (line 01), two verbal signs which also have directions such as TEACH-YOU and MANY-GO (Engberg-Pedersen 2013) along with gaze, towards the door. The door itself is tied to the environment, meaning the reception centre. The gaze also works as a pointing action, and is used as such all the time during negotiation. Ali refers to the reception centre by signing HEARING, SCHOOL, COUNTRY, SPEAK, turning his gaze left and pointing twice towards the door, which is tied to the environment, as Nina did earlier. Gazing and pointing towards the door has a specific function in this interaction. The door has become the object that represents the reception centre.

## 4.2 Searching for a sign with the help of gaze and environmentally coupled gestures

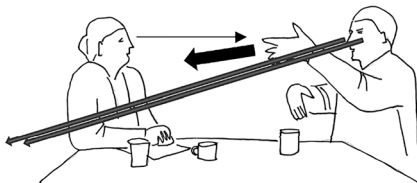
Repairs and word searches are common practices the participants take in conversations for solving problems in understanding (see Schegloff et al. 1977; Drew 1997). Next, we will show how a sign language sign for 'street' is searched for and negotiated through gaze and ECG. Pointing and gazing to the windows in the physical environment is used to activate the participant's interpretation of the sign language sign (see e.g. Laakso 2011). In example 2, Ali and Nina are talking about how and where Ali learned sign language in his country of origin. Ali has visited the deaf club in Tampere (name of the city changed), and he knows the sign for TAMPERE DEAF-CLUB in FinSL. The discussion pauses for a moment to make a word search for a sign for 'street'.

Example 2. *The street*

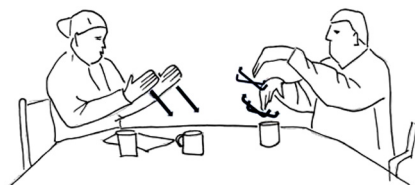
01 A	_____ body turning left _____ forward lean_chin-down gaze left _____ hs
02 N	CD:”DEAF-CLUB PNT-left GO-TOGETHER” CLUB TAMPERE CLUB DEAF PNT-right LI[KE [_hn
03 A	_____ turns head to left _____ gaze to window _____ eyebrows down hs _____ PNT-left CLUB N[O STREET-h PNT-window PA[LM-UP (0.3) fig. 3
04 N	[micro-small hs [head pull backward [open mouth
05 A	eyebrows down STR[EET
06 N	_____ chin-down _____ raised eyebr. [STREET-h fig. 4
07 A	_____ hn STREE[T STREET
08 N	_____ head pull backward_hn [STREET WALK
09 A	shdr dwn _____ head tilt right and backward STAY DEAF SIGN STAY THAT-IT-IS

## Translation:

- 01 A: “See there is a deaf club! Let’s go there together.” (Like) deaf club in Tampere
- 02 N: yes
- 03 A: (but) club (in his country of origin) is not (same). It is on the *street*. How (is it signed)?
- 04 N: Ah?
- 05 A: *Street* ...
- 06 N: (Do you mean) *a street*?
- 07 A: Yes, *street, street, street*.
- 08 N: (People) walk on the street.
- 09 A: Deaf people gather there and sign with each other, that’s the way it is.



**Figure 3:** Gazing and pointing towards the window while another hand holds a sign (line 03).



**Figure 4:** Two sign language signs for ‘street’ (line 05 and 06).

Before searching for a sign, Ali first narrates through constructed dialogue (Cormier et al. 2015) how deaf people go together to a specific place, to a deaf club. When signing and gesturing ‘DEAF-CLUB PNT-left GO-TOGETHER’ his body orientation and facial expressions indicate that he is reporting an utterance of an enacted referent (line 01). In this way, he represents an utterance which can be translated as ‘See, there is a deaf club! Let’s go there together.’ The sign for ‘deaf club’ is a FinSL sign. After this, he orients to Nina with his body leaning forward, chin down, and simultaneously shakes his head and signs in FinSL CLUB TAMPERE CLUB DEAF, and points to his right side, locating Tampere Deaf club to his other side. He then signs with both hands LIKE by forming a circle with his thumbs and index fingers (line 01). In a Finnish context, this emblem hand gesture means ‘good’, but in this case it means more ‘like/just like’. Nina responds with nods that she understands him (line 02). Next, Ali points to the left, referring to his country, and signs CLUB in FinSL, and at the end of the sign starts to shake his head and signs NO with whole palm hand (line 03). Nina responds and overlaps with micro-small head shakes (line 04). Now it becomes clear to Nina that Ali is using the Tampere deaf club as a reference to and comparison with his country of origin: there they do not have the same kind of deaf club as in Tampere.

Next, an ECG, a pointing gesture towards a window in the room comes into play when Ali turns his head to the left and gazes towards the window behind Nina, and produces simultaneously an iconic gesture or an Arab Sign for ‘STREET’ towards the window (line 03). Behind the window, there is only a forest. Shortly after this Ali points with his left hand’s palm towards the windows while his right hand holds the configuration of the gesture/sign ‘street’ (see Figure 3). Next, he moves the left hand a little towards Nina and looks at Nina. The pointing palm turns into an interrogative palm-up gesture, with strong facial expression, eyebrows down, as meaning ‘how’ (line 03), following a 0.3 s pause. By means of these resources, the sign or the gesture ‘STREET’, the gaze and the pointing gesture, and the non-manual elements that formulate a question, Ali accomplishes a first pair part (Sacks et al. 1974): he asks for another sign for ‘STREET’ indicating thereby that he either is unsure about his previous proposition of street or he wants to know and use the FinSL sign for ‘street’ and for this reason is searching for a word (a sign in this case; Goodwin and Goodwin 1986). Switching a gaze away from the listener in order to word search signals the problem (Goodwin and Goodwin 1986; 56–57). Nina does not provide the preferred second pair part, but pulls her head backward and produces an open mouth gesture ‘Ah?’ (line 04).

Orienting to the absence of Nina's second pair part, Ali recycles his turn by repeating the sign/gesture STREET which is prolonged and lasts 1.3 s in total (line 05). Nina overlaps and provides an *interpretation proposal* (Laakso 2011) sign of STREET in FinSL, with question facial expression, raised eyebrows and chin down, and holds the final position of that sign (line 06, see Figure 4). Ali confirms Nina's proposal with a nod and several repetitions of the FinSL sign STREET (line 05). Nina overlaps Ali's second and third FinSL sign of STREET, and checks by describing what usually happens on the street, by signing STREET WALK (line 06). Finally, after negotiating a sign both participants understand, Ali continues to tell what deaf people do on the street (line 07).

Negotiating a sign with the help of gaze and ECG is a complex multimodal process. There is a sequential context, where the sign for 'street' is needed in the interaction, and searching for a sign becomes a relevant action. At first, he uses a short narrative of deaf people gathering in a deaf club. After this, Ali refers to the Tampere deaf club, which is a familiar concept for both him and Nina. The third stage takes place when he compares the deaf club in Tampere as not being the same as places the deaf gather in in his country of origin. In the fourth and final stage, he uses the ECG when he points towards the windows along with the gaze and the sign/gesture for 'street'. Using gaze and pointing towards the windows and Nina's interpretation proposal of STREET was accepted by Ali, but STREET may be, for example, a path. The participants' negotiating of understanding is minimal, emerging through head and body movements and facial features accompanying each move. The use of diverse resources often manifests simultaneously (see e.g. Figure 3).

### 4.3 Gaze and touching as tied to the environment for making meaning

Touch can also be a resource for making meaning (Bezemer and Kress 2014); lacking a shared lexical sign, participants may touch a concrete item or material artefact. Touching can be seen as a deictic gesture (Paananen 2015) which functions as an ECG in this context. In example 3, we focus on both touching and gaze in the interaction: Ali is telling what deaf people do for work in his country of origin, through gaze towards a wall and touching a table, both being made of wood.

Example 3. *Carpentry*

01 A	<i>gaze floor</i> DIG-UP CARRY-ON-SHO[ULDER]
02 N	[ <i>head pull back</i> <i>opens mouth</i> ]
03 A	<i>eyebrows down</i> PNT-2 TCH-temple [DIG-UP CARRY-ON-SHOULDER]
04 N	[_____hn]
05 A	<i>gaze right gaze wall gaze up gaze wall gaze down to table</i> WORK BUILD PALM-UP-h (0.7) PAINT PALM-UP SAW WELDING TCH-table NAIL fig. 5 fig. 6
06 N	
07 A	<i>looking past gaze around hn hs</i> HAMMER [DO-BUSINESS PNT-left GROUP-x] [DEAF A-LOT PNT-left WORK] HAVE-[NOT WORK NO]
08 N	[_____hn] [_____hn] [_____hs]

## Translation:

- 01 A: (they) dig up, carry bags on shoulders ...
- 02 N: ah ...
- 03 A: do you understand (me), (they) dig up it (and) carry bags on shoulders?
- 04 N: yes ...
- 05 A: (they) build houses, umm ... paint ... um ... saw ... welding ... wood ... nail ...
- 06 N: –
- 07 A: hammer ... (they) do make business in groups there. (but) a lot deaf there have no job.
- 08 N: yes ... no ...

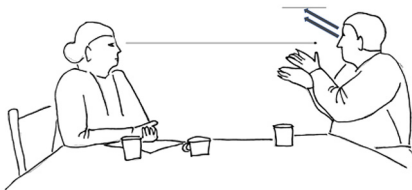


Figure 5: Gaze to the wall (line 05).

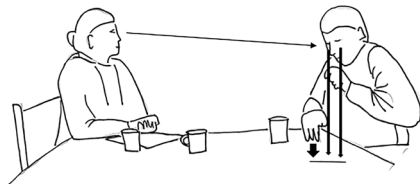


Figure 6: Touching the table (line 05).

Ali turns his body to the left, gaze directed towards the floor, and signs DIG-UP, then switches his gaze back to Nina and signs a verbal sign CARRY-ON-SHOULDER (line 01). Nina responds by pulling her head back and produces an open mouth gesture ‘Ah?’



(line 02; see also example 2, line 04). Ali orients to this as an indication of non-understanding: he checks whether Nina understands by making a direct question, by pointing at her and touching next to his own temple to convey a meaning of ‘understand’, and recycles his prior turn with a question facial expression, eyebrows down (line 03). Nina displays understanding by nodding her head (line 04). Next, Ali starts to describe what deaf people do for work. While signing (line 05, ‘(they) build houses, umm ... paint. um ... ’), he scans the environment, the walls and the ceiling, with his gaze for the artefact and materials linked to the activities he is manually signing about. When he signs BUILD, he simultaneously turns his gaze, head and body towards the wall (line 05, see Figure 5). This is followed by a PALM-UP gesture with a hold during which Ali looks up. Also when signing PAINT, he gazes at the wall of the room and the sign is again followed up by a PALM-UP gesture (line 05). Shortly after, he directs his gaze downwards towards the table and signs SAW and WELDING. Then, with his left hand he touches the unpainted wooden table and simultaneously signs NAIL with his right hand (line 05, see Figure 6). When Ali proceeds to list the work activities (‘hammering’) he continues to gaze around the room (line 06). Nina indicates understanding with a head nod (line 08), after which Ali tells that a lot of deaf people in his home country have no job (line 07).

The analysis illustrates how touching an item, the table, along with using one’s gaze is also a multimodal complex and a resource in meaning-making. This ECG not only refers to a concrete item, such as the table or another object in the environment, but also extends beyond this to encompass human activity, the work in this case. Touching can be described as ‘showing’ in deaf-hearing interactions (Kusters 2017), and ‘grabbing’ in interactions with an aphasic person (Laakso 2011), but we prefer to use the term ‘touching’ in this paper because here the action is not about showing or grabbing. Touching was used rarely during the interview, at least partly because of the institutional setting, and because very few material items were available for the participants to interact with in this venue. In this example, Ali did not ask for a sign for ‘tree/wood’, he only touched the material and assumed that Nina understood him. If there were more items or pictures available to be touched, they may well have been pointed to and touched for communication purposes and the making of meaning. If touching is not possible because of the distance, the gaze’s role becomes more significant along with the sign, such as when Ali looked at the floor and the wall.

## 5 Discussion and conclusion

In response to our research question and as a brief summary, this study shows that using gaze and ECG have a substantial role in negotiating a concept or a sign

language sign when the interlocutors do not share linguistic resources to refer to concepts needed in the conversation. Goodwin (2007) points out that ECG are built through mutual interplay, elaboration between participants, and the spaces and frames of particular settings. Pointing to or touching a specific object does not always mean or refer to the material or the object itself, but is often about the context, for example, being in the reception centre is a resource in itself for meaning making. In sum, gaze and ECG are effective semiotic resources with the potential to encourage understanding and meaning-making.

In reference to asymmetric interaction, the lack of – yet still pursued – shared linguistic resources resulted in challenges for making meaning. Crasborn and Hiddinga (2015, 63–64) contend that successful use of IS is primarily based on three factors: “combining iconic elements from the native language, lexicon, and grammar from any shared languages”; the shared visible context (i.e. the immediate environment); and the shared social context. Of these factors, shared iconic resources and a few conventionalized lexical items of FinSL and IS were available to the participants, Nina and Ali. Shared knowledge of spoken/written languages was not available due to the different writing systems, Latin and Arabic, familiar to the participants. As a further consequence of this, writing and fingerspelling were also not available. Shared contextual knowledge was not always fully available because of different cultural backgrounds of Nina and Ali (see example 3 in subsection 4.3). On the other hand, the second element, the shared visible context, was actively harnessed in meaning making through ECG.

In this paper, we have demonstrated how two people with limited shared linguistic resources reach mutual understanding by employing visual and gestural semiotic resources for meaning making. In our analysis, we highlighted the use of gaze and ECG in particular. What makes the use of such resources possible in this research context? Following Crasborn and Hiddinga (2015) we argue that Ali’s and Nina’s ability to communicate across and beyond language boundaries (or expected conventionalized sets of semiotic resources such as standardized IS signs) comes from one aspect of symmetry between them: their shared experience of being deaf, that is, their experiences of sensorial asymmetry (Kusters 2017). Through the experiences of communicating with non-signing, hearing people, deaf people become accustomed to making use of different modalities for mutual understanding (Crasborn and Hiddinga 2015).

From a social justice stance (Ortega 2019), our study raises crucial questions regarding the asylum seeking process: Is it possible to employ visual and embodied semiotic resources and provide agency for deaf asylum seekers in a meaning-making

process in the context of asylum seeking procedures in a way similar to the one we have shown in this study? We want to highlight the importance of using and recognizing gestural and other visual and embodied semiotic resources in such interactions. Our concern is how the western interlocutors and authorities have the power to choose what languages should be used, and whether to provide access to various affordances for interactions. Moreover, we are concerned about the uncritical use of conventionalized IS and the assumption of the fluent usage of this IS for interpreting in situations where an asylum seeker is a deaf person. These concerns relate to research on interpreted communication in the context of asylum interviews (e.g. Määttä 2015, Puumala et al. 2017). Puumala et al. (2017) highlight instances in interview situations where problems have arisen due to the lack of attention to the embodied actions of asylum seekers. They emphasize how gestures, gazes, and emotional expressions are regularly used in interviews by hearing asylum seekers, yet are ignored in the institutional process; one common way of ignoring the participants' embodied actions is the lack of mutual gaze (Puumala et al. 2017), and the assumption that understanding is based only on linguistic, spoken resources (Määttä 2015). The above-mentioned researchers have raised concerns about situations where spoken language is the main communicative mode in the asylum interview. People working at reception centres in Finland have tackled this challenge by using visual and embodied resources, such as gestures, ready-made pictures and drawings (Tapio 2019).<sup>3</sup> Negotiating mutual understanding in signed interaction in high-stake settings, such as asylum hearings, should be studied and explored to ensure the linguistic rights of deaf asylum seekers in the future.

**Acknowledgments:** We want to express our thanks to Sari Pöyhönen, Mia Halonen, Lindsay Ferrara and Teppo Jakonen for their valuable comments and insights on previous versions of this article. We would also like to thank the anonymous reviewers whose detailed comments and suggestions helped to improve the manuscript. Nina Sivunen is grateful for the support from the Centre of Applied Language Studies (CALs) of the University of Jyväskylä.

**Research funding:** This research was funded by the University of Jyväskylä, Faculty of Humanities and Social Sciences, Humak University of Applied Sciences and by the EU Home Affairs Funds (SMDno:2016-1561) through the PICCORE project.

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<sup>3</sup> For example, the project PICCORE, <http://kuvako.humak.fi/>, a three-year project funded by EU Home Affairs Funds, investigates and develops picture communication in interactional situations at the beginning of the asylum process.

## Appendix

[	beginning of overlapping sign
]	end of overlapping sign
(0.5)	pauses timed in tenths of a second (approximately)
CAPITALS	gloss for a manual sign and a gesture
CD:”XX”	constructed dialogue
PNT-2	pointing to another interlocutor
PNT-right/left	lexical pointing direction
PNT-table/door	pointing to an object in the environment
TCH-table	touch
-h	hold
<u>hs</u>	head shakings
<u>hn</u>	head noddings
<u>shdr dwn</u>	shoulders down
<u>XXXX</u>	eyegaze direction, head and body activities, non-manual elements (e.g. raised eyebrows)
fig. x	The location of the picture (figure x) in the partiture

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