

Social-Haptic Communication in Brazil and Its Developments Paths and Possibilities

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Abstract Social-haptic communication (SHC) is a kinaesthetic language structured through touch on the body of a person who is deafblind. It extends beyond conventional visual and tactile modes of alternative communication, enabling linguistic organisation through grammatical rules. This article presents and discusses the main findings of the first author's doctoral research, focusing on the training of guide-interpreters and the structuring of SHC in its consolidation as a natural language. In addition, it examines the role of narrative in constructing knowledge about and within SHC. This qualitative, narrative-based study draws upon the accounts of deafblind individuals and guide-interpreters who participated in a training course conducted by the first author. Their experiences served as the foundation for data collection and analysis.

Keywords Deafblindness. Social-haptic communication. Guide-interpreter. Libras. Narrative. Training.

Summary 1 Introduction. – 2 Characteristics of the Person with Deafblindness. – 3 The Research Project. – 3.1 Methodological Approach. – 3.2 Participants. – 3.3 Ethical Considerations. – 3.4 Data Analysis. – 3.5 Narratives of People with Deafblindness. – 3.6 Communication Modalities with Persons with Deafblindness. – 3.7 Social-Haptic Communication in the Lives of People with Deafblindness. – 4 Linguistic Aspects of Social-Haptic Communication in Relation to Languages of Different Modalities. – 5 Conclusion and Implications for Practice and Research.

1 Introduction

This article derives from the doctoral thesis of the first author (Vilela 2022), which was developed within the framework of narrative research as proposed by Clandinin and Connelly (2004). The essence of this methodological approach lies in recounting the experiences of both the researcher and the participants. In this case, the participants were professional guide-interpreters of Brazilian Sign Language (Libras) and individuals with deafblindness. The encounter between these participants and their unique modes of communication is narrated through stories that reveal how relationships are formed via touch-based interactions and bodily connection.

Under the supervision of Professor Dr. Adriana Barroso de Azevedo, we constructed a trajectory of discoveries through the dialogues developed over six years of research on deafblindness. This article presents the main developments arising from that doctoral research, which focused on the training of professional translators and guide-interpreters of Libras in the use of social-haptic communication (SHC). It also explores the linguistic construction of SHC, comparing it with both the Portuguese language and Libras, as used by the authors.

The study further benefits from the contributions of professor, translator, interpreter, and guide-interpreter Stephanie Caroline Alves Vasconcelos, who played an integral role in the development of the doctoral project and in the work of the Group for Studies and Research on Inclusion and Social-Haptic Communication (GEPICSH), established in 2021. This interinstitutional and transdisciplinary group comprises researchers and professionals from various educational institutions and diverse fields of knowledge and practice, including the participation of Professor Dr. Riitta Lahtinen and Dr. Russ Palmer, pioneers in SHC. As a research collective, we have focused on the linguistic possibilities of SHC and their broader implications.

The data presented in this article are drawn from a training course in SHC, conducted by the first author, with the participation of deafblind individuals and guide-interpreters. People with deafblindness are those who experience combined hearing and vision loss, either from birth or acquired throughout life, and who primarily rely on the haptic channel – that is, the skin – for interaction and communication. Guide-interpreters act as communication mediators in contexts where deafblind individuals engage with others who do not use haptic-based communication.

This paper also offers a brief overview of the communication forms employed by deafblind individuals and professional guide-interpreters, including SHC, which has expanded and evolved internationally over the years. SHC has developed within deafblind communities to the

point of exhibiting structural features akin to natural languages, enabling grammatical and systematic organisation.

Drawing from the narrative experiences of guide-interpreters and deafblind individuals, the research underscores the need for further investigation to support the recognition of SHC as a natural language. Such recognition would have significant implications for professional training, accessibility development, and the promotion of inclusive practices. The researchers' ethically grounded approach, based on active listening and lived experience, contributes to advancing the field of deafblindness studies, which remains underexplored in Brazilian academic literature, and to promoting inclusion, autonomy, and quality of life for people with deafblindness.

2 Characteristics of the Person with Deafblindness

There are numerous definitions intertwined with the term deafblindness. In Brazil, deafblindness is still rarely mentioned within the broader landscape of disabilities and disorders, which have increased exponentially in recent years. Deafblindness is characterised by the simultaneous partial or total absence of the auditory and visual senses.

Some people argue that, due to this combination, deafblindness should be considered a multiple disability, while others maintain that it represents two distinct impairments. However, the definition of deafblindness as a unique condition serves to strengthen the identity of the deafblind person, acknowledging their specific characteristics and needs. The Brazil Support Group for the Deafblind and Multiple Sensory Disabled (2003, 1) defines deafblindness as follows:¹

a singular disability that presents hearing and visual losses concomitantly to different degrees, leading the deafblind person to develop different forms of communication to understand and interact with people and the environment, providing them with access to information, a quality social life, guidance, mobility, education and work.

This definition highlights the diversity of experiences among deafblind individuals, who must often develop personalised communication systems to achieve social participation and autonomy.

¹ We are quoting from the Information Leaflet on Deafblindness issued in 2003 by the Brazil Support Group for the Deafblind and Multiple Sensory Disabled, a philanthropic organization in São Paulo.

A complementary definition is provided by the Helen Keller World Conference (2022) – named after Helen Keller, a person with deafblindness whose legacy continues to shape understanding of the condition. The Conference’s statement emphasises that deafblindness does not apply only to those with total loss of both senses, but also to individuals with partial visual and auditory impairment, who encounter daily difficulties in communication and mobility:

A person is [deafblind] when they have a degree of severe visual and hearing impairment that causes them serious problems with communication and mobility. A [deafblind] person needs specific help to overcome these difficulties in daily life and in educational, professional and community activities. This group includes not only people who have total loss of these senses, but also those who have visual and/or auditory loss, which should be stimulated so that their ‘disability’ is as small as possible. (HKWC 2022, n.p.)

Keller advocated the idea that people with deafblindness should be encouraged to pursue autonomy and develop their cognitive, sensory, and motor abilities, affirming their potential for learning and social contribution.

It is also important to consider the manner in which deafblindness is acquired, that is, whether the person has congenital or acquired deafblindness (Heller et al. 1994). Another crucial factor concerns the timing of language acquisition – whether it preceded or followed the onset of deafblindness. This directly influences the communication modalities adopted by deafblind individuals (see § 3.3), such as Libras, tactile signing, Braille, or social-haptic communication.

3 The Research Project

We understand research as a thread that weaves human experience through the relationships established among subjects who seek to engage in deep reflection on a given theme (Souza 2022). We live as we narrate, and we narrate as we perceive the experiences that have shaped our existence.

In the development of the first author’s doctoral thesis, it is proposed that narratives and training are interwoven in shaping the experiences of people with deafblindness and translators/guide-interpreters of Libras. In light of this, the research problem was guided by the following question: What perceptions emerge among guide-interpreters of Libras when they employ SHC with deafblind individuals?

These experiences were observed, and the narratives were shared through multimodal texts, in which hyperlinks direct readers

to hypertexts presented in the form of scenes. Drawing upon the discussions developed within the thesis, this article seeks to examine the use of SHC in the training of guide-interpreters and to consider the role of narrative in the construction of knowledge about SHC.

3.1 Methodological Approach

The research adopted a qualitative (Gil 2002), narrative-based methodology, grounded in the work of Clandinin and Connelly (2004, 45), which values lived experience as a source of knowledge, as the authors explain:

People shape their daily lives by stories of who they and others are and as they interpret their past in terms of these stories. Story, in the current idiom, is a portal through which a person enters the world and by which their experience of the world is interpreted and made personally meaningful. Narrative inquiry, the study of experience as story, then is first and foremost a way of thinking about experience.

This approach allowed the researcher to engage closely with participants' stories, interpreting meaning through interaction rather than through objective detachment. The methodology also emphasised ethical commitment, reflexivity, and the co-construction of knowledge between researcher and participants.

The research centres on the importance of training professional guide-interpreters, with the experience forming the basis of the study in question:

For social scientists, and consequently for us, experience is a keyword. Education and studies in Education are forms of experience. For us, narrative is the best way to represent and understand the experience. Experience is what we study, and we study experience in a narrative way because narrative thinking is a key form of experience and a key way of writing and thinking about it. It should be said that the narrative method is a part or aspect of the narrative phenomenon. Thus, we say that the narrative method is the phenomenon and also the method of the social sciences. (Clandinin, Connelly 2004)

In this research, the 'field' consisted of the training sessions, the interpersonal relationships formed during these sessions, and the reflections and narratives emerging from these interactions. The data collection process involved field notes, recordings, interviews, and written narratives from participants. These materials were

subsequently organised and analysed thematically, guided by the principles of narrative analysis (Riessman 2002), which recognises that narratives are not merely reflections of experience, but constructions that give form and meaning to it.

Through this process, we engaged in iterative reflection, noting how participants articulated experience, adapted communicative strategies, and negotiated meaning across multiple modalities.

3.2 Participants

The participants comprised four professional guide-interpreters of Libras and three adults with deafblindness, who took part in the SHC training course. Each participant contributed unique experiences and communicative repertoires, resulting in a rich corpus of narratives.

The guide-interpreters were professionals accustomed to working with deaf people, yet with limited experience with deafblind individuals. Conversely, the participants with deafblindness already employed diverse communication strategies, including tactile signing, written Portuguese, and elements of SHC. The interaction between these groups offered insights into linguistic adaptation and multimodal expression.

The training course spanned eight months, 90 hours, consisting of weekly in-person sessions combining theoretical lectures, practical exercises, and group discussions. We facilitated the sessions while observing the participants' engagement, reflecting on how they internalised and adapted SHC strategies.

3.3 Ethical Considerations

The research adhered to the ethical principles established by Resolution no. 510/2016 of the National Health Council, which regulates research involving human participants in Brazil. All participants provided informed consent, with adaptations in accessible formats, such as tactile explanations, Braille, and enlarged print, to ensure comprehension and autonomy.

The project was approved by the Research Ethics Committee of the Methodist University of São Paulo, under Protocol no. 4.693.442. Ethical conduct in this study extended beyond formal approval, encompassing what Clandinin and Connelly (2004) refer to as "relational ethics", that is, ethics that emerge in the lived relationship between researcher and participants.

The narrative research design required the researcher to enter the participants' world through touch, dialogue, and shared physical space, which demanded a sensitive awareness of vulnerability,

agency, and mutual respect. This ethical engagement was crucial to building trust and authenticity within the narrative process.

3.4 Data Analysis

The narratives produced during the training were analysed through a thematic and interpretative lens, focusing on how meaning was constructed and shared through SHC. The analysis was guided by Clandinin and Connelly's (2004) three-dimensional narrative inquiry space - interaction, continuity, and situation - which allowed the identification of patterns and transformations across participants' stories.

As the authors explain, narrative as a research methodology in the field of education enables us to represent and understand lived experiences. Thus, in order to capture these experiences, we developed a course that considered the training dimension within the research-training framework, which involves the sharing of new knowledge and expertise. From this process, strategies were developed to enhance the professional practice of guide-interpreters.

From this perspective, the extension course "Continuing Training of Guide-Interpreters to Work with People with Deafblindness in Learning Social Haptic Communication" consisted of eight classes, during which the scenes were recorded and shared through a multimodal text approach. As Jewitt (2003) explains,

multimodal approaches have proposed concepts, methods, and working perspectives for the collection and analysis of visual, auditory, embodied, and spatial aspects of interaction and environments, as well as the relationships between them. (Dionísio et al. 2014, 48)

The multimodal approach is characterised by the use of technological resources that enable the representation of meanings beyond the written text. In the video lessons, it is possible to observe participants' facial expressions, voice intonation, surrounding environments, and the sensations conveyed through these elements. Among people with deafblindness, we observed body posture and expressions that reveal feelings not expressed through words.

Excerpts from the classes are available via hyperlinks and by scanning a QR code with a mobile phone camera. The device identifies the code and directs the reader to the corresponding content, allowing access to a section of the course in which narrative and experience are shared. For example, Scene 5 presents an empathy activity designed to allow participants to place themselves in the 'position' of the deafblind. During a class break, participants were

blindfolded and asked to prepare breakfast. From this experience emerged the narrative of Scene 5, in which Ana Lis shares her perception of the activity and emphasises that everyone should have such an experience.

SCENE 5: ANA LIS' EXPERIENCE IN THE EMPATHY ACTIVITY AND IMAGE SHARED VIA WHATSAPP

Theme: Characteristics of the Person with Deafblindness



Ana Lis: “[...] We live in a two-storey house. As we had already had breakfast, I said, ‘I’m going upstairs’. Cristina had already warned me that the bathroom was full of things, and I realised she was right, because I knocked everything over. As I walked, I dropped things from the table and even spilled some water. It was truly an experience – when you live it, you realise how difficult it is. I even shared a photo of this experience with Cristina in the group. She joked, thinking it was Acsa, but I said, ‘No! It was me who was blindfolded!’ She interpreted a song of praise, and I understood almost nothing. Tadoma is really difficult to follow – it’s a challenging experience. But it’s also a very meaningful one, because we can feel, at least a little, what a deafblind person experiences. I think it’s an experience that everyone should go through.”

Source: Vilela 2022, 63

In the first meeting of the extension course, the narratives were charged with emotion as each participant recalled the starting point of their journeys with inclusion, Libras, and their contact with deaf and deafblind individuals.

SCENE 1: FIRST MEETING OF THE EXTENSION COURSE

Theme: Attributes of the guide-interpreter's work



Source: Vilela 2022, 63

Many of the experiences shared by the participants were related to inclusion within the educational context, as all of them work or have worked as teachers or Libras interpreters for deaf or deafblind students.

3.5 Narratives of People with Deafblindness

In Scene 9, we present the narrated experience of Leandro, a participant with deafblindness, who recalls his story and the sensory loss of hearing and vision. He recounts his memories through Libras, interpreted into spoken Portuguese by his wife, Charlie:

SCENE 9: LEANDRO'S EXPERIENCE

Theme: Characteristics of the Person with Deafblindness



Leandro: “I was still a baby – when I was a few months old, I had very severe otitis and went to the hospital. Then I lost my hearing, but I could still see. [...] As a teenager, I tried to use hearing aids, but I couldn’t. At the age of fifteen, I began to feel pain in my ears and eyes; I experienced great anxiety, and my vision started to close in. I was isolated, living with my family on a farm. I lost my sight – I couldn’t manage anymore: playing games, watching games, taking vitamins... One morning, I woke up, went to the bathroom, and looked in the mirror. I was startled – I realised I wasn’t seeing anymore. [...] I was twenty-two years old [...]”

Source: Vilela 2022, 70

Leandro highlights the lack of communication within his family, as well as the isolation and sadness he felt: “I had my brothers, but no one communicated with me. I felt very isolated. People did not understand this new phase of my life, and communication was very difficult”. The challenge of acquired deafblindness involves a complex process of adaptation – not only for the person who acquires the condition, but also for those around them.

3.6 Communication Modalities with Persons with Deafblindness

Guide-interpretation is not a simple activity, as it requires the guide-interpreter to learn the communication modalities used by deafblind individuals and to employ strategies that enable the transmission of information, including spatial and contextual cues. The guide-interpreter often translates spoken messages into tactile forms received through the hands of the person with deafblindness. This work demands dedication and embodiment: the interpreter communicates not only with their hands but with their whole body, sharing expressions, sensations, experiences, and knowledge that give meaning to interaction.

During the course “Continuing Training of Guide-Interpreters to Work with People with Deafblindness in Learning Social Haptic Communication”, one of the classes – “Forms of Communication and Guide-Interpretation Strategies” – was designed according to the characteristics of the participants with deafblindness. All participants with deafblindness used Tactile Libras, and all students were familiar with and employed this modality in communication.

The course presented three main bases of communication with people with deafblindness:

- i. communication based on spoken language;
- ii. communication based on written language;
- iii. communication based on Libras.

In the following scenes, images and definitions from classroom discussions are presented.

SCENE 13: FORMS OF COMMUNICATION – SPOKEN BASE

Theme: Forms of communication and guide-interpretation strategies

Base Falada

Base Falada:



Tadoma

Base Falada:



Fala Ampliada



Elaine: “[...] In the spoken base – the speech-based communication – we’ll highlight two main forms: Tadoma and expanded speech. These are based on speech, so the guide-interpreter will use the same language the deafblind person uses or understands. [...] In Tadoma, the deafblind person places their hand on the speaker’s face or neck to feel the vibration of the vocal cords, which helps them understand the sound. I once used this method with a deafblind woman and her sister – both of them used Tadoma. Have you seen anyone else who uses Tadoma, Hilda?”

(Hilda shakes her head negatively)

Elaine: “Just the two of them, too?”

Hilda: “That I attended it was just the two of them, but we know that there are other people who use it, but that I had attendance only the two of them.”

Elaine: “And Cristina too! Cristina too, I’ve already served her with tadoma, so these are the ones...”

Elaine: “[...] in this spoken base that is Tadoma the deafblind needs to be apprehensive of this, so for example, Cristina she learned, she had to relearn the question of speech, so what happens, when she touches her throat and the other person she measures this vibration, and it happens a lot with this deafblind person who learns to speak, who did not know how to speak and learns to speak, is it impossible? It’s not impossible, nothing is impossible [...]”

Source: Vilela 2022, 80-1

The written base relates to the guide-interpreter’s work with literate deafblind individuals. In Brazil, Braille is used to transpose the Portuguese language into a tactile writing code, enabling reading through touch and the use of assistive devices such as the Braille Display.²

² The Braille Display, or Display Braille, is a very simple device that is able to instantly convert text or data from computers, mobile devices, or an internal memory to a line of embossed text using the Braille System. <https://oampliadordeideias.com.br/como-funciona-uma-linha-braille/>.

SCENE 15: FORMS OF COMMUNICATION – WRITTEN BASIS

Theme: Forms of communication and strategies of guide-interpretation (see video referring to Scene 14)

Base Escrita:

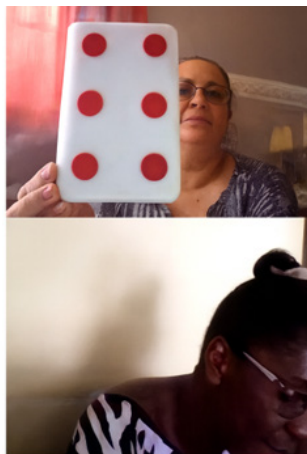


Elaine: “The written base, let’s talk about **braille** because it has braille writing and also because it has writing on the palm of the hand, which is also based on writing, so if the deafblind person is literate you can use writing on the palm of the hand, which can be on the palm of the hand, sometimes on the back, on the forearm, then each deafblind person has sensitivity in a different space [place of the body] [...]”

Elaine: “[...] The written base, look at the Braille, the **tactile braille**, so where is the Braille there, Ashlee, where is Ashlee the Braille? To show us the saddle [...]”

Elaine: “**Braille** is not a language, it is a code of a writing, so anywhere on the planet that has the letter A, the Braille code will always be in the same position as the letter A, the letter B, the letter C; show Mary to us, Braille cells. Tell Japinha to get it there to show it. So the Braille code is made up of six embossed dots. [...] we use tactile Braille using two fingers, index and middle, [...] Braille has six points, right? And we have six little pieces of finger look, which is called phalanx people, did you know it was called phalanx? Culture, my God in heaven! Phalanx, these ‘little tequinhos’ here are phalanxes that call, so they are the phalanges. I learned this by studying, right guys, I didn’t know, for me it was a finger weaver; now I know it’s a phalanx! So show it to us, Mary, so it’s six points, that’s it, it’s six points, okay?”

SCENE 15: FORMS OF COMMUNICATION – WRITTEN BASIS



“So we count like this: 1,2,3,4,5,6 (do the demonstration with your fingers), [...] tactile Braille is very important [...]”

Source: Vilela 2022, 70

In communication systems based on Brazilian Sign Language (Libras), the tactile finger-spelling alphabet corresponds to the Portuguese alphabet. In Tactile Libras and Libras in a reduced visual field, the main difference lies in the mode of reception. Tactile Libras is expressed in a tactile-kinaesthetic (haptic) modality, while reduced-field Libras is expressed in a visual-spatial modality adapted to the person's remaining vision.

SCENE 17: FORMS OF COMMUNICATION – LIBRAS BASE

Theme: Forms of communication and strategies of guide-interpretation (see video referring to Scene 14)

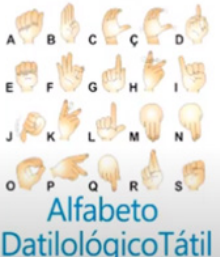
Base Libras – Língua Brasileira de Sinais

Base LIBRAS:

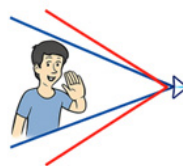


LIBRAS Tátil

Base LIBRAS:



Base LIBRAS:



LIBRAS em Campo Reduzido

Elaine: “[...] and the basis of Libras we have the tactile Libras and Libras in a reduced field, and I remember Chico a lot in this aspect. So, here are some examples, the images, I think you’ve all seen them, but who hasn’t seen them [...] Libras is a language, the Brazilian sign language, for example there in Portugal, the language that Márcia is learning: the Portuguese sign language, then the language, has a grammatical, syntactic, morphological, semantic characteristic, which is why it is a language.”

<https://www.youtube.com/watch?v=X60xLPDpscQ> (0:43’05”-0:44’23”)

Elaine: “[...] And then when we talk about Libras, Brazilian sign language has several forms, and it also fits into other sign languages around the world, so Márcia will also use this base in the same way, only with Portuguese sign language. So it would actually be the tactile Portuguese sign language, and for us the tactile Libras, the Brazilian tactile sign language. Then there is also the issue of the alphabetical base, which is the dactylological alphabet. The typewriting alphabet in Libras is linked in the question of writing. So if the deaf person does not know the letter ‘A’, you will not make the letter ‘A’ for him in the typewriting alphabet. It will have no purpose [...] it is a type of communication linked to the alphabet, a type of alphabetic communication. Pounds in a reduced field, which is what Chico is using now, right, Nalva? He is using this type of communication that is Libras in a reduced field. During the day when the night is getting [darkening], he loses his vision, then the issue of tactile Libras is better, the tactile Libras is more noticeable to him.”

Source: Vilela 2022, 70

3.7 Social-Haptic Communication in the Lives of People with Deafblindness

Social-haptic communication offers rich possibilities for interaction, conveying information in a holistic and embodied manner. As a guide-interpreter, the first author has had several opportunities to use SHC with deafblind individuals and has observed its significance through their expressive responses to the information conveyed.

The first recorded instance of SHC appeared in 1991 in Örebro, Sweden, during the 10th International Congress of Deafblindness, organised by the International Association for the Education of the Deafblind (IAEDB). Riitta Lahtinen introduced the first haptic signs: yes, no, arrival, and exit. Since then, SHC has spread worldwide. The first article on the subject appeared in the Proceedings of the 3rd IAEDB (DbI) European Conference, Potsdam, 1993 (Palmer, Lahtinen 1994).

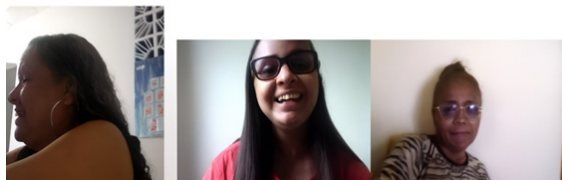
In Brazil, SHC was introduced years later by guide-interpreters and deafblind individuals who participated in the 10th Helen Keller World Conference, held in the Philippines in 2013. There, they met Kathrine G. Rehder, a Norwegian guide-interpreter, who presented the possibilities of haptic communication. This encounter initiated a process of dissemination through workshops and courses involving guide-interpreters, family members, and professionals working in the field of deafblindness (see Araújo et al. 2019).

As Araújo, Pereira, Santana Júnior (2014, 4) explain, “haptic signs can be created and expanded according to the needs of the deafblind person and the professional who works with them”. The authors emphasise the creative potential of SHC in expanding communication possibilities.

A narrative was shared by Acса, describing how she began using SHC with a person with deafblindness:

SCENE 21: ACSA'S EXPERIENCE IN THE SOCIAL-HAPTIC COMMUNICATION TEACHING PROCESS

Theme: Strategies in tab-interpretation and use of social-haptic communication



Acsa: “Ouch! Come out girl, look what you’re doing to me!”

Acsa: “[...] Cristina, it was wonderful because she endured a lot, I pushed her sometimes. I didn’t know, it was awful at first. One experience I had with Cristina was when I spent 5 days with her; eating, sleeping [...]. And she kind of jumped on the bandwagon and we ended up learning together.”

Source: Vilela 2022, 106

Another narrative comes from Charlie, Leandro’s wife, who describes the SHC strategies they developed for daily communication and information exchange:

SCENE 23: CHARLIE AND LEANDRO’S EXPERIENCE

Theme: Strategies in tab-interpretation and use of social-haptic communication



Charlie: “[...] as if the communication of the human being is automatic, I had never thought about social-haptic communication; but, as difficulties arose in everyday life, I developed some signs without knowing anything, for example, I started to warn Leandro on the back, that of leaving with the little fingers to walk, and develop without knowing the signal to wait.”

Source: Vilela 2022, 109-10

During the course, Charlie demonstrated the strategies and skills she has refined over time, sharing new signs she developed to communicate with Leandro. Through these shared SHC signs, we can perceive the richness and creativity inherent in human language development.

4 Linguistic Aspects of Social-Haptic Communication in Relation to Languages of Different Modalities

Although languages operate through different modalities, they share a fundamental property: smaller, meaningless units combine to form meaningful ones. In Portuguese, an oral-auditory language, phonemes combine to form morphemes and words. In Libras, used by the deaf community within the gestural-visual-spatial modality (Quadros et al. 2000), and in Tactile Libras, which operates in the gestural-tactile modality, cheremes (Stokoe 1960; Capovilla 2011) combine to form signs. The chereme represents the smallest unit of hand movement, just as the phoneme represents the smallest unit of sound.

In SHC, haptices – that is, haptic-tactile-kinaesthetic signs – are composed of minimal units called haptemes (Lahtinen 2008). The following table summarizes the comparison of different linguistic systems:

Table 1 Linguistic comparison

Linguistic system	Public	Minimum units	Meaningful units
Portuguese	Hearing People	phonemes	words
Brazilian Sign Language	Deaf People	cheremes	signs
Social-Haptic Communication	Persons with deafblindness	haptemes	haptices

5 Conclusion and Implications for Practice and Research

The research presented in this article, based on the activities of the GEPICSH (Study and Research Group on Inclusion and Social-Haptic Communication), reinforces the understanding that social-haptic communication possesses structural characteristics comparable to those of natural languages, allowing for grammatical and systematic organisation.

From the narrative experiences of guide-interpreters and people with deafblindness, the need for recognition of SHC as a legitimate language becomes evident, with direct implications for professional training, the development of public accessibility policies, and the promotion of inclusive practices. This study represents an important step forward in the field of research on deafblindness and communication.

The research reported here also opens avenues for further investigation and proposes the establishment of foundational frameworks for building a coherent communication system – not only for people with deafblindness, but for all individuals who perceive the world through seeing, hearing, and feeling with the body.

Bibliography

- Araújo, H.F. de; Canuto, B.S.; Santana, C.A. Jr; Lourenco, K.R.C. (2019). *Práticas de Interpretação Tátil e Comunicação Háptica para Pessoas com Surdocegueira* (Practices of Tactile Interpretation and Haptic Communication for People with Deafblindness). Petrópolis: Editora Arara Azul.
- Araújo, H.F. De; Pereira, R.C.; Santana Júnior, C.A. (2014). “Comunicação háptica complementando a informação ‘Jogos da Copa do Mundo’ através do toque”. *Anais do Congresso Nacional de Pesquisas em Tradução e Interpretação de Língua Brasileira de Sinais e Língua Portuguesa*. <https://publicacao.copels.com.br/index.php/tilsp/issue/view/16>; <https://publicacao.copels.com.br/index.php/tilsp/article/view/1034/580>.
- Capovilla, F.C. (2011). “Quiremas, visemas e bipeds implumes: por uma taxonomia da linguagem do surdo”. *Revista Espaço*, 36.
- Clandinin, D.J.; Connelly, F.M. (2004). *Narrative Inquiry: Experience and Story in Qualitative Research*. San Francisco, CA: Jossey-Bass.

- Dionísio, A.P.; Vasconcelos, L.J.; Souza, M.M. de (2014). *Multimodalidades e Leituras: funcionamento cognitivo, recursos semióticos, convenções visuais*. Recife: Pipa Comunicação.
- Gil, A.C. (2002). *How to Design Research Projects*. 4th ed. São Paulo: Atlas.
- Heller, K.W.; Kennedy, C.; Cooper, L. (1994). *Etiologies and Characteristics of Deafblindness*. Monmouth, OR: Western Oregon State College, Teaching Research Publications.
- Lahtinen, R. (2008). *Haptics and Haptemes: A Case Study of Developmental Process in Social-Haptic Communication of Acquired Deafblind People* [PhD Dissertation]. Tampere: Cityoffset Oy.
- Palmer, R.; Lahtinen, R. (1994). "Communication with Usher People". *Deafblind Education*, July-December, 7-9.
- Quadros, R.M. de; Silva, J.B.; Royer, M. (2020). "Grammar of Libras: Methodological Issues". *Fórum Linguístico*, 17(4), 5526-42.
- Riessman, C.K. (2002). "Narrative Analysis". Huberman, A.M.; Miles, M.B. (eds), *The Qualitative Researcher's Companion*. Thousand Oaks, CA: SAGE Publications, 217-70. <https://methods.sagepub.com/book/edvo1/the-qualitative-researchers-companion/chpt/narrative-analysis>.
- Souza, C. (2022). "Narrative Research: Sensitive Methodology in Relation to the Object(s) Investigated". Azevedo, A.B.; Borrego, C.L.; Vilela, E.G. (eds), *Narrative Research Collection: Conception*, vol. 1. 1st ed. São Bernardo do Campo: Educação Metodista, 116-42.
- Stokoe, W. (1960). *Sign Language Structure: An Outline of the Visual Communication Systems of the American Deaf*. Buffalo: University of Buffalo, Department of Anthropology and Linguistics. Studies in Linguistics: Occasional Papers 8.
- Vilela, E.G. (2022). *Social Haptic Communication and Its Ways of Construction: Narratives and Experiences of Guide-Interpreters and People with Deafblindness in Training Processes* [PhD Dissertation]. São Bernardo do Campo: Universidade Metodista de São Paulo (UMESP).
- Vilela, E.G.; Borrego, C.L.; De Azevedo, A.B. (2021). "Pesquisa Narrativa: uma proposta metodológica a partir da experiência". *Revista de Estudos Aplicados em Educação*, 6(12), 75-85.
- WFDB – The World Federation of the Deafblind (s.d). *Helen Keller World Conference*. <https://wfdb.eu/helen-keller-world-conference>.