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The challenge of the standardization of Linguistic Lexicon in Italian Sign Language

Navigating Complexity,
Contexts, and
Collaboration

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I believe that a very significant part of studying and conducting research is driven by curiosity and the willingness to ask questions. Curiosity is the cornerstone of intellectual growth and discovery, serving as the catalyst that propels us beyond the surface of simply understanding - it is this inborn desire to explore, to question, and to seek answers that forms the bedrock of meaningful research and academic pursuit.

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Abstract

Sign languages, unlike spoken languages, rely on visual-gestural modalities, utilizing a rich array of handshapes, movements, and facial expressions to convey meaning. The lexicon of Italian Sign Language (LIS) is shaped by regional dialects, cultural influences, and community practices, leading to considerable variability. This variability stems from the intricate history of LIS and its intertwining with social and educational developments for the deaf community in Italy.

This thesis aims to chart a course towards standardizing the LIS lexicon within the field of Linguistics. With the increasing presence of LIS in academic settings, there is a growing need for specialized terminology. This study explores the contexts of LIS usage, contemporary challenges, and factors shaping its lexicon, ultimately proposing a framework for a cohesive and standardized lexicon tailored to LIS users in academic contexts.

The first chapter examines the intricacies of LIS and International Sign lexical systems, focusing on signs used in specific contexts and strategies for new sign formation (neologisms). The role of interpreters and Deaf linguists in the evolving landscape of interpretation practices is also explored. The research chapter delves into the methodology, employing qualitative analysis through observation, literature reviews, and expert interviews. A comparative analysis traces the similarities and differences between LIS and International Sign, highlighting the emergence of neologisms and criteria guiding sign selection. Original visual materials present signs currently circulating in the academic discourse of the signing community.

Collaboration is pivotal, engaging interpreters and experts to validate proposed signs, navigating the complexities of sign language Linguistics. The concluding chapter synthesizes the findings, presenting a visual representation of circulating signs and reflections on the future of specialized linguistic terminology for LIS, laying the groundwork for future research.

INTRODUCTION

Unlike spoken languages, sign languages rely on visual-gestural modality, employing a diverse array of handshapes, movements, and facial expressions to convey meaning. Within the visual medium, the lexicon of LIS is shaped by various factors, such as regional dialects[1], cultural influences, and evolving community practices. As a result, the lexicon of LIS exhibits considerable variability, with signs often emerging temporarily within time-place specific contexts and circulating in the community through different channels.

This is due to the intricate history of LIS which is deeply intertwined with the social and educational developments for the deaf community in Italy. Prior to the late 19th century, there was a lack of standardized sign language across Italy. Instead, various regional sign languages existed, each evolving independently within local deaf communities. These regional sign languages were used informally and lacked a unified structure. A significant turning point occurred in 1880 at the International Congress for the Education of the Deaf held in Milan. This congress marked a pivotal moment in the history of sign language education, not just in Italy but globally. The congress endorsed oralism, a teaching philosophy that emphasized speech and lip-reading over sign language. This decision led to the suppression of sign languages in educational settings worldwide, including LIS. Consequently, LIS was marginalized in formal education, and deaf individuals were encouraged to communicate orally. Despite the suppression of LIS in schools, the language continued to thrive within the Deaf community. Outside educational institutions, LIS was preserved and evolved through everyday interactions among deaf individuals. The language's resilience is a testament to the strong cultural and social bonds within the Deaf community, which ensured its transmission across generations even in the face of systemic suppression (Branchini 2014).

The historical background and the overall nature of sign languages as dynamic languages pose an additional challenge to standardization, as unlike written languages, which exist both orally and codified in written language, the former exist primarily in the oral dimension, which makes them inherently fluid, with signs evolving over time in response to new inputs, cultural shifts, technological advancements and social dynamics. This fluidity does not exclude the possibility of a standardized

[1] This concerns older generations of signers more but the schooling situation in Italy – especially until the ’90 – played an important role in the emerging of different lexicon and variabilities in LIS. Different Deaf Institutes were spread in the northern and south of Italy, resulting in regional but also Institute related language differences.

language, but it calls for a flexible and adaptive approach to standardizing the lexicon of LIS, one that acknowledges and accommodates diverse needs and preferences of the Signing Community.

With what has been said in mind, this thesis endeavors to chart a course towards the standardization of the lexicon of LIS within the field of Linguistics – with the increasing presence of Italian Sign Language (LIS) in university/academic settings, already evident at Ca' Foscari University with undergraduate and graduate degrees, and now expanding to other institutions, including the translation of parts of LIS grammar as accomplished by the SIGN-HUB project in both Italian and English, there arises a need for specialized terminology. Therefore, the purpose of this study is first to delve into the contexts of usage of LIS, the contemporary challenges, providing insights into the factors shaping its lexicon, but most importantly to lay the basis for a cohesive and standardized lexicon in the fields of Linguistics tailored to the unique needs of LIS users in academic context, all the while proposing a framework for future research in the field.

The first chapter will look into the intricacies of LIS and International Sign lexical language systems, with a special focus on signs used in specific contexts of use and linguistic strategies for new signs formation (neologisms). All the while, exploring the pivotal role of interpreters working in the field and Deaf linguists/experts on the evolving landscape of interpretation practices and linguistic engagement within the Deaf Community.

The research chapter, sets on a methodological expedition, delving into the layers of the research methodology. An exploration of qualitative analysis follows, through observation, literature reviews and interviews with experts in the field. Through a comparative analysis, we trace the threads of similarity and difference between LIS and International Sign, exploring the signs currently circulating within the International and Italian Signing Community, therefore focusing on the emergence of neologisms and the criteria that guide the selection of proposed signs. Through the production of original visual materials - which will also be the end product of this thesis - I will present the signs that are circulating in the signing community in academic discourse, hoping to lay the groundwork for future research.

This work recognizes the importance of collaboration – the weaving together of diverse perspectives and expertise to enrich our understanding and validate findings. Therefore, it engages in a dialogue with interpreters already working in the field, seeking their feedback and validation for proposed signs. Through this collaborative process, it seeks to navigate the complexities of sign language Linguistics.

In the concluding chapter, the findings of the research are synthesized, presenting you with the product of this study, which will be the visual representation of the signs that are currently circulating in the community and hypothesis and reflections regarding the future of specialized linguistic terminology for LIS.

CHAPTER 1: Lexicon in the visual modality

This first chapter delves into the complex world of sign language lexicon, focusing on the unique characteristics of Italian Sign Language (LIS) and International Sign (IS). Beginning with an exploration of the fundamental features of LIS, the chapter examines how signs emerge and evolve within the Deaf community. The aim is to comprehensively analyze the lexicons of LIS and IS, examining the processes of sign creation, dissemination, and evolution within the Deaf community. By establishing an understanding of sign language lexicon and neologisms formation, the research seeks to lay the groundwork for analyzing specialized language in the field of linguistics and formulating neologisms relevant to linguistic discourse.

Transitioning to IS, the chapter elucidates its role as a lingua franca for Deaf individuals from diverse linguistic backgrounds, tracing its origins to the 1950s and its development through global contributions. Unlike national sign languages, IS draws upon a multitude of sign languages and cultural influences, serving as a bridge for cross-cultural communication while lacking the structural coherence of established sign languages. Despite this, IS exhibits language-like strategies for sign creation, with new signs spread through international events, workshops, and digital platforms. Furthermore, the chapter investigates the creation of neologisms in both LIS and IS, exploring similarities and differences with spoken languages. It examines the semantic need for new signs, the collaborative processes involved in their formation, and the criteria for their acceptance within the Deaf community. Drawing on linguistic theories and examples from specialized fields, the chapter underscores the dynamic nature of sign language lexicon and its responsiveness to societal shifts and technological advancements. Moreover, the chapter spotlights the crucial role of native LIS users in the diffusion of new signs through media platforms, serving as linguistic models, content creators, advocates for language accessibility, cultural ambassadors, and community engagers. It showcases examples such as the PANCAKE project, which aims to enhance nature accessibility for the Deaf community through the standardization of plant signs, demonstrating the collaborative efforts to enrich sign language lexicon in specialized domains.

In conclusion, the chapter emphasizes the symbiotic relationship between sign language lexicon and the linguistic landscape, illustrating how linguistic research, community engagement, and technological innovations converge to shape the dynamic evolution of sign languages such as LIS and IS. Through an exploration of lexical systems and neologism creation, the chapter showcases the

richness, diversity, and vitality of sign languages as vibrant modes of communication within the Deaf community and beyond, laying the foundation for future analyses in specialized linguistic domains.

1.1 Organization of sign language systems

Sign languages exhibit a sophisticated and structured lexicon composed of various sublexical units and parameters, as defined by Brentari and Padden (2001) and Brentari and Cormier (2017). The organization of this lexicon is often analyzed through different categories that reveal the intricate nature of sign formation and usage. These categories include the core lexicon, non-core lexicon, and non-native lexicon, each with distinct characteristics and components. This section provides an in-depth exploration of these categories and the phonological parameters that define the structure and articulation of signs within sign languages.

The core lexicon in sign languages consists of signs made up of meaningless sublexical units such as:

- **Handshape:** Different shapes formed by the hands, which can be selected based on specific features.
- **Place of Articulation (POA):** Locations on the body where signs are produced.
- **Movement:** The motion involved in creating the sign, which can vary in direction, speed, and repetition.
- **Orientation:** The direction the hand faces and its relationship to the POA.

These elements combine to form signs with a highly conventionalized form and meaning association, similar to phonemes in spoken languages. Phonological models account for these parameters and how they organize to create distinct signs. One such as the Prosodic Model is a key framework for representing the hierarchical and sequential structure of these phonological parameters. It suggests that each parameter is organized in a binary branching manner, reflecting how these elements combine to form complex signs. For instance, handshape and POA are seen as inherent features, while movement is treated as a dynamic, sequential element within the model. The core lexicon is the most studied area in sign language phonology due to its structured nature.

The non-core lexicon includes signs composed of meaningful units. These typically involve classifier constructions or sequences of constructed action, where the handshape, location, and movement carry inherent meaning. These signs are often more flexible and context-dependent than those in the core lexicon. They may represent actions or describe spatial relationships dynamically.

The non-native lexicon refers to fingerspelled sequences, which are a form of lexical borrowing from spoken languages. Each hand configuration corresponds to a letter of the spoken language's alphabet, used to spell out words. This method of borrowing adapts the spoken language's alphabet into a visual-manual modality, creating a bridge between the two language forms.

Sign languages, like spoken languages, consist of minimal units that can create contrasts between signs. These units include handshape features (e.g., [+flexed], [-flexed]), which can differentiate signs similarly to phonemes in spoken languages. The organization of these features within signs follows a structured hierarchy, ensuring each sign is distinct and recognizable.

In summary, the lexicon of sign languages is multifaceted, with the core lexicon comprising conventionalized signs, the non-core lexicon involving meaningful classifier constructions, and the non-native lexicon representing borrowed fingerspelled sequences. Phonological models like the Prosodic Model provide a framework for understanding the intricate structure and organization of these elements within sign languages.

Today, the key areas of LIS research include:

- **Lexicon**: Scholars have investigated the core vocabulary of LIS, including the ways in which new signs are created and spread and how the language borrows signs from other sign languages.
- **Phonology**: This area focuses on the sub lexical structures of LIS, such as handshapes, movements, locations, and non-manual markers like facial expressions.
- **Morphology**: Researchers examine how LIS forms complex signs through compounding, derivation, and inflection, paralleling morphological processes in spoken languages.
- **Syntax**: Studies of LIS syntax explore sentence structures, word order, and the ways in which meaning is conveyed through sign sequences and grammatical markers.

Research on LIS is conducted by academic institutions, linguistic centers, and deaf associations. Collaborations between linguists and native signers are crucial for documenting and analyzing the language, ensuring that research is grounded in the lived experiences of the Deaf community.

1.2 LIS and IS lexicon

LIS, recognized as the primary language of the Deaf Community in Italy, parallel to other sign languages of the world, is characterized by its ability to convey meaning through manual gestures,

facial expressions, using space and body as syntactic elements/features, and body movements. The emergence of signs in LIS, as any other language, is intricately tied to various contextual factors, including cultural, social and environmental influences – contexts such as familial settings, educational institutions, and Deaf Community gatherings serve as fertile grounds for the creation and proliferation of new signs tailored to meet communicative needs. The lexical richness of LIS is not static but dynamic, with signs evolving over time in response to changes in societal norms, technological advancements, and linguistic innovations. The creation of new signs within LIS often involves various strategies, including iconicity, lexical borrowing or compounding.

IS – contrary to national sign languages that are specific to their country of origin – serves as lingua franca for communication among Deaf individuals from different linguistic backgrounds, facilitating cross-cultural exchange and collaboration. In the 1950's, the World Federation of the Deaf (WFD), called for the need of an international signing *system*. Over the decades, IS has developed through worldwide contributions of Deaf Communities and language experts worldwide.
It is important to specify that IS is a form of communication used by deaf people who come from different countries or linguistic backgrounds; however, it is not to be considered a language in its own right, such as American Sign Language (ASL) or French Sign Language (LSF). It draws upon a diverse array of sign languages and cultural influences, and it incorporates elements of various sign languages to form a common lexicon accessible to Deaf individuals worldwide.

The reason behind it not being defined as "International Sign *Language*" is perhaps because it does not have the same level of linguistic structure, consistency and coherence found in established sign languages – the focus is more on its role as a means of communication between individuals from different countries, cultures, and sign language communities, rather than a standalone language with its own grammar. It is more of a pidgin or contact language that arises when people from different sign languages backgrounds come together, usually for a specific occasion. Therefore – since it draws from the lexicon and grammar of various sign languages – it is not as standardized and can vary significantly depending on the individuals involved.

It is true, however, that within the same communicative event there will be coherency and standardization among the interpreters, as the professionals will agree in advance on which lexicon to use to better meet the communicative needs of the event/workshop/seminar etc.

IS – even though it does not hold the status of "language" – still shows language-strategies for sign creation. These new sign formations are influenced by the need for cross-cultural intelligibility and

clarity. Signs within IS may be derived from iconic gestures, existing signs from different sign languages (mainly ASL), or signs that already belong to IS. The dissemination of new IS signs within the community relies on mechanisms such as international conferences, workshops, and digital platforms, where Deaf individuals from different countries converge to share linguistic innovations and best practices. Therefore, both LIS and IS are shaped by the communicative needs of the signing community, and the dissemination of signs within these languages highlight the dynamic nature of sign languages.

1.3 Creation of Neologisms

The process of creating neologisms in spoken languages and sign languages is not too different. It shares some similarities in regard to why new terms emerge and how, but also some differences in how they are spread. Both spoken and signed languages are in constant evolution to meet the communicative needs of their users. The semantic need to create new words or signs emerges when language users encounter new concepts, new realities or experiences that the existing vocabulary does not adequately cover or explain. Neologisms may be influenced by cultural shifts, technological advancements, social movements, reflecting the evolving nature of language and society. Hence, new lexicon is often created through innovation within the language community. This innovation can occur more spontaneously and consequently more "randomly" through everyday communication or in more controlled environments, such as academic settings. Speakers/Signers may come up with new terms independently or collaborate to coin them.

In previous discussions whether sign languages are languages in their own right, one point that was made in favor of sign language (Lillo-Martin, Sandler 2006) is the ability to produce language, i.e. *productivity* (Brentari 2019). Both spoken and signed languages have productive systems for word/sign formation. This entails that users of language can apply rules and strategies to create new words or signs based on existing linguistic elements (e.g. morphemes, phonemes…).

Frequently with the emerging and spreading of a new term, there is a period of debate, when the linguistic community negotiates the acceptance of new words/signs, as they engage in discussions and consensus-building processes to determine the adaptation and standardization of new lexicon. The acceptance of new lexicon often depends on its perceived effectiveness, usefulness, ease of production and comprehension within the community.

Though it is true that as languages, spoken and sign languages share some fundamental similarities, they are also inherently different due to the different modalities and linguistic structures of each type of language. The main difference is the channel of communication – visual-gestural for sign languages and acoustic-vocal for spoken languages.

In spoken languages, communication occurs through the acoustic-vocal channel. This means that it involves the production and perception of sounds. The primary organs used include the vocal cords, tongue, lips, and respiratory system, which work together to produce phonemes, the smallest units of sound that convey meaning. Listeners perceive these sounds through their auditory system, which processes the acoustic signals and interprets them as language.

In contrast, sign languages use the visual-gestural channel for communication. This involves the use of hand shapes, movements, facial expressions, and body postures to convey meaning. Signers produce signs using their hands, face, and body, while viewers perceive these signs visually. The visual-gestural modality allows for a rich and dynamic expression of ideas and emotions, with spatial and kinetic elements playing a crucial role in the structure and interpretation of the language.

These differences in modality lead to distinct linguistic structures and cognitive processes in each type of language. For instance, the visual-gestural nature of sign languages allows for simultaneous expression of multiple pieces of information through different channels (e.g., hand movements combined with facial expressions), while spoken languages typically convey information sequentially through a linear stream of sounds.

Understanding these fundamental differences helps highlight the unique aspects of each type of language and the diverse ways in which human beings can communicate and express themselves.

1.3.1 Neologisms in LIS and IS

Creating new signs or neologisms in sign languages involves some of the elements that are mentioned in the previous paragraph, with the addition of some other strategies (Brentari 2014):

- **Iconicity**: in sign languages, iconicity refers to the similarity, which can be abstract and partial, between a sign's form or sequence of forms and the concept it represents. This resemblance can manifest in various aspects of the sign, such as handshape, movement, location, and facial expression, leveraging the spatial and visual aspects of communication unique to sign languages (Perniss, Thompson, Vigliocco, 2012)(Pietrandrea, 2002). This is

more evident for certain types of objects or actions. It involves the choice of handshape, placement in the body and type of movement. This contrasts with arbitrary signs, where there is no inherent connection between the form of the sign and its meaning. Therefore, some signs directly “mimic” the physical characteristics of an object.

TELEPHONE (1)

TELEPHONE (2)

TABLE

CLOUD

Another element which we should consider is the use of space.

BIG BUILDING

Signs can also have a degree of iconicity in a more metaphorical sense (Lillo-Martin, Sandler, 2006), meaning the relationship between the form of the sign and its significance is less evident but it can still evoke a mental image.

UNDERSTAND TRANSPARENT

SUPPORT

Actions or movements associated with activities or objects can eventually become signs. This refers to how an object might be handled or used.

GLASS

SALAME

COFFE

- **Combining signs/Compounding**: another strategy often used is combining already existing terms to create new signs or create modifications to convey new meanings.

COMPUTER

GARDEN/PARK

- **Fingerspelling**: this one is commonly used for proper nouns, technical terms, or words for which there is not a standard established sign.

- **Initialization**: it involves using the initial letter or letters – often with a small circular or trembling movement – of the corresponding word in spoken language. This strategy is often used for technical or abstract concepts.

COCA COLA DVD

- **Borrowing**: sign languages, like spoken languages, may borrow signs from other languages or systems. These borrowed signs tend to be adapted to fit the phonological and morphological rules of the recipient language.

SPORT

MUSIC

The creation of new signs involves collaboration within the deaf community – deaf individuals who are native users of sign language play a crucial role in innovating and adopting new signs to meet their communication needs. What often happens is when in need of a new sign, different varieties will spontaneously emerge and spread. Many deaf community members are very active online on various platforms, so discussions and debates will be held to determine which sign varieties perform the best[2]. A platform that hosts a lot of debate is most definitely "L'Accademia della S-Crusca" a Facebook page, on which members of the signing community discuss many topics, such as new signs, regional varieties, etc. After some time, the sign that results more effective and most agreeable to the deaf community will become the most used one.[3] It is the example of FACEBOOK, for which a few signs emerged and after a trial period of these options, the one that seemed to work best became the most popular one.

[2] The evolution of technology has contributed to a more uniformized language, as well as speeding up the process of picking new signs.

[3] The other signs might still circulate; another possibility is that different areas/cities will prefer one over the other ones.

All the while, institutions such as CNR–Instituto di Scienze e Tecnologie della Cognizione (CNR-ISTC), Ente Nazionale Sordi (ENS) – The national deaf association of Italy, and Universities such as Ca' Foscari University of Venice, might intervene in the discussion or help with the standardization of the debated signs.
Another powerful means of diffusion is the media, as the signs used by the interpreters often become the most popular ones, due to the vast exposure of television and other media.

As mentioned, native LIS users play a crucial role in the diffusion of

- **Linguistic Models:** Native LIS users serve as linguistic models for the creation and dissemination of new signs through media platforms. Their expertise in the language enables them to accurately demonstrate sign production, grammatical structures, and language variations, ensuring the integrity and authenticity of neologisms.
- **Content creators**: Native LIS users actively contribute to the creation of sign language content for various platforms, including videos, tutorials, vlogs, and social media posts. They generate content that often generates new signs, while explaining their meanings and usage (some of these signs can be borrowed by other sign languages, or entirely new signs).
- **Advocates for Language Accessibility**: Native LIS users advocate for language accessibility in media by promoting the use of sign language interpreters, captioning, and other accessibility features. They raise awareness about the importance of inclusive communication practices and advocate for the rights of Dead individuals to access information and media content in their preferred language.
- **Cultural Ambassadors**: Native LIS users serve as cultural ambassadors for the Deaf community, representing its linguistic and cultural diversity through media outreach. They promote Deaf culture, traditions, and identity, fostering greater understanding and appreciation within society.
- **Community Engagement**: Native LIS users actively engage with the Deaf community through media platforms, encouraging participation, collaboration, and feedback on new signs and language innovations. They facilitate discussions, share resources, and promote community-driven initiatives to enrich the linguistic landscape of LIS.

Overall, native LIS users play a pivotal role in the diffusion of new signs through the use of media by serving as linguistic experts, cultural ambassadors, and advocates for language accessibility. Their

active involvement ensures that sign language content is accurate, inclusive, and reflective of the linguistic and cultural diversity within the Deaf community.

Moreover, the impact of native LIS users extends beyond just the creation and dissemination of sign language content; they also play a critical role in preserving and evolving the language itself. Through their active participation in media, they document and archive contemporary usage and emerging trends in LIS, which helps in maintaining a living record of the language. This archival work is invaluable for linguistic research and for future generations of signers, ensuring that the language remains vibrant and adaptable to new contexts and technologies. By bridging the gap between traditional linguistic heritage and modern innovation, native LIS users not only safeguard their cultural identity but also pave the way for the dynamic growth and adaptation of LIS in an ever-changing world.

1.3.2 Neologisms in sector-specific language

Neologisms in sector-specific languages involve these lexical strategies, however, there needs to be a higher degree of "controllability". Terms often emerge in specific fields through various processes tailored to the needs and dynamics of those fields. Experts in the field and academics are to negotiate and analyze the diffusion of a new language, as to ensure its accuracy. The field of interest of this research is Linguistics – however before starting – we shall briefly examine a few examples from the English language that spread to many languages to give an idea of new terms emerging in specialized language.

Technology: in field like technology, neologisms often arise to describe new inventions or concepts.

- "*Selfie*" emerged with the rise of smartphone cameras and social media platforms.

Medicine: neologisms in this field often arise to label new diseases, treatments, or medical technologies:

- "*COVID-19*" emerged in 2020 to describe the novel coronavirus disease.

Environmental Science: neologisms often arise to describe emerging environmental issues:

- "*Anthropocene*" defines the current geological epoch characterized by human impact on the Earth's ecosystem.

In these fields, neologisms serve to communicate evolving concepts, phenomena, and technologies, reflecting the dynamic nature of human knowledge and innovation. The same happens for sign language: the same social and cultural shifts affect the Deaf community, often with a short delay as there might be an issue of accessibility at first (i.e. Facebook, Instagram, Covid-19).

1.3.3 Example for sign formation in specialized contexts: Project PANCAKE

An interesting case in which lexicon has been standardized in specialized language, namely Botany, is the PANCAKE project. The PANCAKE Project is a collaborative initiative aimed at improving the accessibility of nature to the Deaf community. Led by Friends of the Earth Malta, the project involves participants from four countries: Malta, Spain, Italy, the UK, and Octavo, an online platform chosen to transmit the project's message and facilitate its dissemination. The project seeks to establish common signs for nature-related terms that can be universally understood, akin to the Botanical Latin used by flora enthusiasts and researchers worldwide. By doing so, it aims to make nature more accessible to the Deaf community and enhance knowledge about flora while promoting inclusive public spaces. The project's actions include enhancing national sign languages with plant signs, creating educational videos and sign language documentaries, compiling a manual of best architectural practices for inclusivity, and adapting materials into online interactive content.[4]
PANCAKE Project Meetings:

- **Ebro Delta, Spain (November 16th - 17th, 2021)**: The inaugural meeting focused on brainstorming project ideas and networking. Participants visited the 'Mon Natura' reserve and eco-museum to acquaint themselves with partners and prepare for project implementation.
- **Rome, Italy (May 23rd - 24th, 2022)**: The second meeting discussed budget updates, intellectual outputs, and task division among partners. Deaf representatives from associations and botanists presented draft signs, discussed common signs, and reviewed the draft manual's index. The meeting concluded with a visit to the 'Museo Civico di Zoologia.'
- **Edinburgh, UK (November 21st - 22nd, 2022)**: Partners convened to discuss the sign list, present work to British partners, and plan future activities' dissemination. They also visited the Edinburgh Botanic Gardens for a British Sign Language (BSL)-signed tour.

[4] https://octavo.blog/2023/04/pancake-project-making-nature-accessible-to-deaf-communities
https://foemalta.org/previousprojects/pancake/

The PANCAKE project is set to continue until 2024, with ongoing updates available through Friends of the Earth Malta and Octavo. Additionally, a manual for guides and interpreters in nature reserves has been developed as a resource for enhancing accessibility in natural environments.

1.4 The need for linguistic-specific signs

Sign Language has been exploring the field of Linguistics since the late 80's, when LIS started being researched and gained the status of language within the signing community. Before that, it was mostly considered as a form of communication used by deaf people and their relatives. It started circulating in academic settings, conventions, workshops and seminars and the need for specialized language progressively grew stronger.

Even though it had already been traveling around many academic settings and everyday life for decades, it was only in 2021 that LIS was recognized as an official language in Italy. Advocacy efforts by Deaf organizations, linguistic experts, and allies culminated in heightened awareness and political momentum surrounding the importance of recognizing LIS as a distinct and legitimate language. Article 34-ter recognizes, promotes, and protects Italian Sign Language (LIS) and the tactile Italian Sign Language (LISt). The article, concerning "Measures for the recognition of Italian Sign Language and the inclusion of people with hearing disabilities," also acknowledges the roles of LIS interpreters and LISt interpreters as specialized professionals in the translation and interpretation of LIS and LISt, respectively[5]. This recognition signifies a fundamental shift in attitudes towards sign languages acknowledging their linguistic richness, cultural significance, and intrinsic value. As mentioned before, before linguistic-scientific research sign languages used to be considered as a mere gestural communication system within the community itself as well, so its recognition further affirms their status as languages with complex grammatical structures and expressive capabilities.

Today LIS exists in many contexts, such as university courses and bachelor's and master's degrees, educational institutions and associations. Furthermore, there are many conventions, events and seminars that revolve around linguistic research.

[5] https://www.ens.it/e-un-giorno-storico-la-repubblica-riconosce-la-lingua-dei-segni-italiana/

1.4.1 Linguistic research in LIS

The scientific study of LIS (Italian Sign Language) began gaining momentum in the 1980s, inspired by the groundbreaking work of William Stokoe on American Sign Language (ASL). Stokoe's research demonstrated that sign languages possess their own grammatical structures and linguistic properties, challenging the previously held view that they were mere gestural systems. Following this paradigm shift, Italian linguists and researchers began to systematically analyze LIS, exploring its unique linguistic features.

The formal recognition of LIS as an official language in 2021 marked a significant milestone in its history. This recognition has paved the way for its inclusion in academic discourse and research. However, because LIS has only recently been acknowledged as a legitimate language. Even prior to that, the study of LIS within the realm of linguistics is still very much recent. This nascent stage means that there is a lack of standardized linguistic resources and comprehensive academic literature on LIS. Nevertheless, the growing body of research is progressively enriching our understanding of its structure and use.

As the interest in LIS grew, various seminars, conventions, conferences, focus groups, and lessons have been organized to advance research, promote understanding, and enhance the linguistic landscape for the Deaf community. Below are some of the major events and initiatives:

- **International Conference on Sign Linguistics and Deaf Education (CILS):** CILS is a conference that brings together researchers, educators, and practitioners in the field of sign linguistics and Deaf education. It is not specific to LIS, but it often features presentations and discussion that are useful to all sign languages linguistic practices.
- **National LIS Conventions:** brings together members of the Deaf Community, sign language interpreters, educators and researchers. The convention serves as a platform for networking, knowledge sharing, advocacy, and collaboration within the Deaf Community. The themes vary for each different convention, but often they revolve around linguistic research, language policy, education, accessibility and social inclusion for Deaf individuals. Participants engage in workshops panel discussions, presentations, and activities. The convention provides the opportunity for dialogue between the Deaf community and representatives from government agencies, educational institutions, and other organizations.

- **National Associations of LIS Interpreters (ANIOS, AILS, ANIS, ANILS, T'AMILIS):** these associations organize conferences, workshops, seminars and focus groups aimed at sign language interpreters but often include discussions on linguistic aspects of LIS.
- **LIS Linguistics Summer School (ISSLS):** is an event that provides intensive learning opportunities for students and researchers interested in LIS linguistics. It covers various topics, including phonetics, morphology, syntax, and sociolinguistics.
- **University courses**: in Italy several universities and educational institutions offer courses, degrees, and programs focusing on LIS teaching and interpretation. These programs aim to train professionals in sign language teaching, interpretation, and linguistic research. So, there is a lot of discussion around Linguistics.
- **Focus Groups and Workshops**: universities and research institutions sometimes organize focus groups and workshops on LIS Linguistics. These events may investigate specific linguistic phenomena, methodological approaches or gaps in research areas.
- **LIS courses and workshops**: various organizations offer courses and workshops on LIS that may touch upon topics such as phonology, morphology and syntax.
- **Online resources and Webinars**: with the increasing use of online platforms, there is a growing availability of webinars, online courses, and resources focusing on LIS linguistics.

1.4.2 Linguistic research in IS

The international signing community hosts several significant events, conferences, seminars, conventions, and workshops that bring together Deaf individuals, sign language interpreters, researchers, educators, and advocates from around the world. These events serve various purposes, including promoting Deaf culture and sign languages, sharing knowledge and research findings, discussing relevant issues, and fostering collaboration. Below are some of the major events within the international community:

- **World Federation of the Deaf (WFD) Congress:** is a quadrennial event organized by the World Federation of the Deaf, the global organization representing Deaf people worldwide. It gathers deaf individuals and sign language users to discuss issues regarding the Deaf Community, share best practices, and promote Deaf rights and sign languages.
- **International Conference on Sign Language and Deaf Education (ICSLDE):** is a conference focused on sign language linguistics, Deaf education, and related topics. It provides a platform for researchers, educators, and practitioners to present their work, exchange ideas, and collaborate on advancing sign language and Deaf education globally.

- **European Forum of Sign language Interpreters (EFSLI) Conference:** hosts a conference that brings together sign language interpreters from across Europe. The conference covers topics related to sign language interpreting practice, ethics, research, and professional development.
- **Gallaudet University Academic Symposium:** Gallaudet University, a leading institution for Deaf education and research, hosts academic symposiums on various topics relevant to the Deaf Community and sign languages. Their symposiums feature presentations by scholars, educators, and sometimes students on their research and innovative practices.

1.4.3 Linguistics in Interpreting practices

In all the events mentioned above, the presence of sign language interpreters is required – interpreters which are also knowledgeable about the field of linguistics and familiar with the use of specialized terminology. Sign language interpreting practices have evolved significantly over the years, deeply influenced by linguistic research and developments within the Deaf Community. With the integration of LIS into academic settings, conventions, workshops, and seminars, a growing demand for specialized language expertise sparked.

Therefore, major events such as the World Federation of the Deaf (WFD) Congress, European Forum of Sign Language Interpreters (EFSLI) Conference, and Gallaudet University Academic Symposium, University of Ca' Foscari lectures or seminars, just to mention a few, require the skills of highly trained interpreters in the field of Linguistics. In conclusion, the field of sign language interpreting is intricately intertwined with Linguistics, as evidenced by the historical developments and ongoing initiatives within both LIS and IS communities.

CHAPTER 2: Investigating Specialized Lexicon in LIS

In this chapter, I will embark on an exploration of the research methodology employed to study the dynamics of sign language lexicon within specialized language in the realm of Linguistics. The investigation draws upon a multifaceted approach, beginning with an overview of LIS history and its circulation within academic settings to better understand the task at hand. Following that, the analysis of visual materials sourced from the conference 'Formal and Experimental Advances in Sign Language Theory' (FEAST) held in 2020. These presentations, conducted in International Sign (IS), serve as a rich source of linguistic discourse, offering insights into the lexical strategies employed in sign language interpretation of complex linguistic concepts. Moreover, I will delve into the recordings of lessons in Italian Sign Language (LIS) from Ca' Foscari University of Venice, examining the structured learning experiences provided. Consequently, I will outline the methodologies used in the analysis of the aforementioned sources. Through this examination, I aim to discern the prevailing linguistic trends and sign language features circulating within the signing community of Italy. Furthermore – by synthesizing insights from these diverse sources – I endeavor to shed light on the potential applicability of lexical terms from IS within the context of LIS. Each term will be examined in context, considering its usage, linguistic features, and semantic nuances within the sign language discourse. In addition to this, focus groups with interpreters and native signers will be conducted to gather perspectives and insights on the usage and interpretation of the terms. These discussions will enrich this study by including practical expertise and professional perspectives. Ethical considerations will be upheld throughout the research process, ensuring respect for the participants' rights and privacy – measures will be implemented to maintain confidentiality and anonymity.

The lexical terms under examination in this thesis[6], have been selected from the SIGN-HUB platform. As delineated in the preceding chapter, the overarching objective of this work is to come up with terms of specialized linguistic lexicon of LIS, which will be then used in the partial translation of LIS grammar carried out by SIGN-HUB.

SIGN-HUB stands as a pioneering project at the forefront of sign language research and documentation, offering a wealth of digital resources, tools, and educational materials tailored to the needs of sign language researchers and enthusiasts worldwide. As I embark on this research journey, it is imperative to gain a comprehensive understanding of the SIGN-HUB platform and its

[6] The list will be provided in Appendix 1.

significance in advancing knowledge and understanding of sign languages as vibrant linguistic systems.

2.1 LIS Grammar

The SIGN-HUB project (2016-2020) - conceived as a comprehensive hub of resources for sign languages - was funded by the European Commission through the Horizon 2020 framework program. This platform serves as a focal point for sign language research, education, and awareness, advancing the understanding of sign languages as unique and valuable linguistic systems.

Central to SIGN-HUB's mission is the development of sophisticated digital materials of sign languages. This corpus comprises extensive video recordings of sign language users from various communities and contexts, meticulously annotated with metadata, including demographic information, contextual data, and linguistic annotations. Researchers can utilize this corpus to analyze linguistic features, study language variation, and investigate language change over time.

SIGN-HUB offers several key resources:

- **Grammars**: Digital grammar descriptions of seven sign languages, produced using a novel online grammar writing tool that implements the Sign-Gram Blueprint (Quer, J., Cecchetto, C., Donati, C., Geraci, C., Kelepir, M., Pfau, R. & Steinbach, M., 2017).
- **Atlas**: An interactive digital atlas of linguistic structures of the world's sign languages, providing a comprehensive overview of linguistic diversity.
- **Assessment**: Online sign language assessment tools designed for professionals, facilitating the evaluation and improvement of sign language skills.
- **Life Stories**: The first digital archive of life narratives by elderly signers from participating countries. This archive includes partly subtitled and partially annotated videos for linguistic properties, and features the documentary movie "We were there, we are here," based on these interviews.

Most content on the platform is immediately accessible to the public[7], while some require applying for restricted access. However, all content is available for free, ensuring broad accessibility. Detailed instructions for accessing each type of content are provided on the platform.

[7] https://thesignhub.eu/

The technical infrastructure supporting SIGN-HUB is robust and innovative. Hosted by ORTOLANG, a French public research infrastructure, the platform employs advanced database management systems for scalability and accessibility. Data processing techniques, including machine learning and natural language processing, automate annotation and analysis tasks. An intuitive user interface and integrated collaboration tools further enhance usability and facilitate real-time communication and data sharing among researchers.

SIGN-HUB was created by a consortium of prestigious institutions: University of Amsterdam, Boğaziçi University, Ca' Foscari University of Venice, University of Milan-Bicocca, CINI (Consorzio Interuniversitario Nazionale per l'Informatica), CNRS (Centre National de la Recherche Scientifique), Georg-August University of Göttingen, University of Paris, Pompeu Fabra University, and Tel Aviv University. This collaborative effort has ensured the platform's comprehensive and high-quality content, supporting ongoing research and educational initiatives.

By providing a rich repository of sign language data and tools, SIGN-HUB significantly advances the knowledge and understanding of sign languages. The project promotes sign language education through high-quality resources and increases public awareness and appreciation of sign languages. By fostering a global network of researchers and educators, SIGN-HUB ensures the sustainability and growth of sign language studies, contributing to the preservation and appreciation of linguistic diversity worldwide.

For what concerns LIS, the project has made significant strides by developing a comprehensive grammar, clinical tests, and enriching the linguistic atlas with valuable data and interviews with elders. Initially, the grammar was released in English in 2020[8] to meet the European project's requirements. Recognizing the importance of accessibility for the Italian community, it was translated into Italian in 2022[9].

Recently, the project received funding from the SPIN project[10] and internal funds from Ca' Foscari University to translate some of the content into Italian Sign Language (LIS). This funding underscores SIGN-HUB's unwavering commitment to inclusivity and linguistic diversity. By making these

[8] https://thesignhub.eu/grammar/lis?tag=53
[9] https://edizionicafoscari.unive.it/media/pdf/books/978-88-6969-645-9/978-88-6969-645-9_LW3OSf9.pdf
[10] https://www.unive.it/pag/31926/

resources available in LIS, the project aspires to support LIS users in their research, education, and appreciation of their language, thereby enriching the global understanding of sign languages.

Therefore, this research is motivated by the need to establish a coherent lexicon for linguistic terms in LIS. As the partial translation of LIS grammar has been funded, a significant challenge stands due to the lack of standardized lexical terms for linguistic concepts in LIS. Unlike in Italian and English, where the lexicon in the field of linguistics is standardized and widely accepted, LIS suffers from a fragmentation of terminologies. This inconsistency poses a problem for the translation process, as without a standardized lexicon, each translator might develop their own version of terms, leading to a lack of coherence and uniformity in the translated materials. To address this issue, it is crucial to establish a standardized lexicon that can be used uniformly by all translators before commencing the translation work. This involves a meticulous process of studying and analyzing the signs that have emerged in the linguistic discourse. By focusing on neologism formation strategies—methods by which new signs are created to represent new concepts[11]—we can identify and understand the most effective and widely accepted signs within the LIS community.

2.2 List of terms from SIGN-HUB

As part of the project's section on grammars, a glossary of linguistic terms has been developed. This glossary provides clear definitions and explanations of key linguistic concepts, serving as a valuable resource for researchers, educators, and students. It enhances the accessibility and understanding of the grammatical content provided on the platform. For the purpose of this study, a subset of terms has been chosen for investigation, focusing specifically on those deemed most pertinent for the partial translation of LIS grammar.

In this section, key terms from the Sign Hub are identified and selected - the creation of a preliminary list of terms that were of particular interest was the first step of the analysis of materials phase. This pre-selection phase was critical in providing a focused approach to the analysis, enabling me to hone in on specific linguistic elements relevant to my study. These terms were chosen based on their frequency and significance within the context of LIS and its specialized linguistic terminology. However, I maintained an open-minded approach throughout the research process. While my pre-selection list served as a guide, I remained receptive to any additional findings that emerged during

[11] See chapter one to review neologisms formation strategies.

the analysis. This flexibility ensured that I could capture a broad spectrum of linguistic variations and nuances that might not have been initially anticipated.

The aim is to explore and analyze the possible signs for these selected linguistic terms within LIS. This exploration is grounded in a comprehensive review of existing signs that are currently in circulation within academic settings such as the ones previously mentioned, signs that have been observed in recorded sign language resources, and new signs that I propose based on my observations and analysis.

2.3 Data sources

The research involves collecting signs from various sources, including educational materials, conference presentations, and academic discussions[12] - as previously mentioned. These signs are then analyzed for their handshape, movement, placement, and the linguistic principles underlying their formation[13]. By debating and selecting the signs that appear most efficient and appropriate for conveying complex linguistic concepts, a coherent lexicon can be outlined.

2.3.1 FEAST 2020

As mentioned, a source of this exploration is rooted in the tapestry of presentations housed within the Formal and Experimental Advances in Sign Language Theory (FEAST) conference of 2020.
FEAST is an academic conference dedicated to advancing the understanding of sign languages from various theoretical and methodological perspectives. It serves as an opportunity for researchers, scholars, and practitioners from around the world to present their latest findings, exchange ideas, and engage in discussions related to sign language linguistics.
The conference typically covers a wide range of topics, including but not limited to:

1. Formal Linguistics: this area explores the structural properties of sign languages, such as syntax, morphology, phonology, and semantics. Researchers investigate the grammatical rules and patterns that govern sign language communication, drawing parallels and contrasts with spoken languages.
2. Experimental Linguistics: experimental studies delve into the cognitive and psycholinguistic aspects of sign language processing. Researchers employ various experimental

[12] The sources under analysis will be available in 2.3.1 FEAST 2O2O and 2.3.2 LIS lessons.
[13] The analysis will be made available under Appendix 2.

methodologies, such as eye-tracking, reaction time studies, and neuroimaging techniques, to investigate how sign languages are perceived, produced, and comprehended by signers.

3. Sign Language Acquisition: this strand of research focuses on how individuals acquire sign languages, both as first and second languages. Researchers examine the linguistic development of deaf children and adults learning sign languages in naturalistic and educational settings.
4. Language Variation and Change: linguists investigate the variation and change that occur within sign languages over time and across different signing communities. This includes studying regional dialects, language contact phenomena, and the emergence of new signs and linguistic features.
5. Sociolinguistics and Deaf Culture: Scholars explore the social and cultural aspects of sign language use, including the role of sign languages in deaf communities, language attitudes, language policy, and the representation of sign languages in society.

FEAST provides a forum for scholars to disseminate their research findings through presentations, poster sessions, and panel discussions. It fosters interdisciplinary collaboration and encourages innovative approaches to the study of sign languages. By bringing together experts from diverse fields, FEAST contributes to the advancement of sign language theory and promotes greater awareness and appreciation of sign languages as rich and complex linguistic systems.

FEAST is largely carried out in IS, hence the decision to analyze the FEAST conference stems from a strategic pursuit - to unearth the linguistic lexicon utilized within the sign language discourse. These convention videos presented a unique structure, accommodating both hearing and deaf presenters. When the presenter was hearing, the presentation was delivered in English with simultaneous interpretation into LIS. In contrast, when the presenter was deaf, they would sign in LIS, accompanied by simultaneous voice interpretation into English. This dual modality provided a rich comparative perspective, allowing me to analyze both the interpreters and the deaf individuals. Furthermore, the presenters at the FEAST convention were from the international community, adding a diverse range of linguistic inputs and interpretations to my dataset.

As mentioned in 2.2 List of terms from SIGN-HUB, armed with a curated list of terms sourced from SIGN-HUB glossary, each presentation became an opportunity to scrutinize the linguistic landscape, noting every instance where a lexical term surfaced. Systematically noting the occurrence of predefined lexical terms allowed for the identification of patterns, trends, and recurrent linguistic

strategies employed by presenters. The terms, meticulously selected based on their relevance to the specialized linguistic domain of LIS, served as the guiding compass in navigating the linguistic terrain of FEAST presentations.

It is to be noted that - while the overarching academic nature of the event provided a degree of coherence and uniformity - the nuances of individual signing styles and different backgrounds introduced a layer of diversity into the linguistic landscape. Despite the slight variations in signing style and expression, a sense of linguistic coherence permeated the proceedings of FEAST 2020. Academic discourse served as a unifying force, guiding presenters and interpreters towards a common goal of scholarly inquiry and intellectual exchange.

The analysis of FEAST 2020 presentations holds practical implications for the potential transfer of linguistic strategies and lexical terms to LIS. While each sign language exhibits its unique characteristics and idiosyncrasies, they also share common aspects of linguistic structure and word formation. By identifying recurring linguistic strategies and innovative sign forms within FEAST presentations, valuable insights into potential avenues for adaptation and integration within the context of LIS can be discerned.

Within the diverse array of FEAST presentations, innovative sign forms and lexical strategies emerge. These linguistic innovations, while rooted in the specific contexts of the communicative event, possess inherent adaptability and transferability to other sign languages, including LIS. By closely examining these innovative sign forms and discerning their underlying principles, we unlock potential avenues for adaptation and integration within the context of LIS. In the intersection of linguistic diversity and academic discourse lies an opportunity for cross-linguistic understanding and cohesion within the sign language community. By acknowledging and embracing the variability inherent in sign language expression, the way for greater inclusivity and collaboration across linguistic boundaries is paved.

Ultimately, the meticulous examination of linguistic lexicon within FEAST presentations serves a dual purpose: not only to deepen our understanding of sign language dynamics but also to lay the groundwork for interlingual transfer. By scrutinizing the linguistic strategies employed in IS contexts, we aim to discern the potential applicability of lexical terms within the context of LIS. Each observed sign becomes a potential candidate for cross-linguistic transfer, bridging linguistic divides and fostering greater cohesion within the sign language community.

2.3.2 LIS Lessons

In parallel, the journey extends to the classrooms of Ca' Foscari University of Venice, where lessons are sometimes conducted with the presence of a LIS interpreter - these lessons can vary in topic from history, to literature, to linguistic discourse. The latter is the one that mostly concerns this research - lessons are held in the field of sign language, sign language theory and practice, Linguistics, Applied Linguistics, Comparative Linguistics, and Interpreting and Translating. These recordings varied in format, with some including subtitles along with the videos, and others featuring LIS without any transcripts. The subtitles served as an additional textual reference that complemented the visual signs, aiding in the precise identification and analysis of terms. In addition to that, the PowerPoint presentations used during these lessons provided valuable visual aids, offering contextual information that enhanced my understanding of the material.

An integral part of this research is the involvement of interpreters from VEASYT, a platform that provides online video interpreting services. VEASYT facilitates remote communication between Deaf and hearing individuals by offering professional sign language interpreters via video calls. This service ensures that high-quality interpretation is accessible regardless of geographical location, making it a vital tool for both everyday communication and specialized contexts such as academic settings.

The interpreters from VEASYT have kindly offered to participate in this study and have given their consent to watch the recordings of the lessons and conference presentations. Their participation goes beyond mere observation; they actively engage in focus groups where they discuss their interpretation choices and potential signs. This collaborative approach allows for a deeper exploration of the interpretative strategies used and the effectiveness of various signs within specific linguistic contexts.

Their participation is invaluable, as it provides practical insights and professional perspectives that enhance the robustness of the research. VEASYT interpreters bring a wealth of experience and expertise to the table, having navigated a wide range of communicative scenarios. Their insights into the nuances of sign language interpretation, including the challenges and strategies involved, are crucial for understanding how to best represent complex linguistic concepts in LIS.

By contributing their knowledge and experience, VEASYT interpreters help identify which signs are most effective and widely accepted within the community. This input is critical for developing a standardized lexicon that can be consistently used by all translators. Moreover, their feedback on the

potential signs ensures that the selected signs are not only linguistically accurate but also practical and intuitive for both interpreters and Deaf users, as it helps to refine the signs based on collective feedback. This iterative process helps in fine-tuning the lexicon, making it more comprehensive and user-friendly. The feedback from interpreters working in the field, ensures that the resulting lexicon will be practical, coherent, and beneficial for the entire LIS community, thereby supporting the broader goals of sign language research and education.

Therefore - through observation and analysis - I gleaned valuable insights into linguistic lexical and interpreting strategies. However, it's imperative to acknowledge the interpretative nature of these events - the effectiveness of the interpretation is contingent upon numerous factors, including the interpreter's linguistic choices, the deaf student's comprehension level, the complexity of the topic, and whether it pertains to a beginner or advanced lesson. Despite these variables, the lessons proved to be beneficial, offering a nuanced understanding of language interpretation within academic settings. By observing the lessons of LIS, the aim is to discern the prevailing linguistic trends and sign language features that permeate the contemporary signing community.

It is important to note that throughout the research process, ethical considerations will remain paramount, ensuring the respect and dignity of all participants involved. To safeguard confidentiality and anonymity, measures will be implemented - the interpreters and individuals participating in the research, as well as those featured in the videos and materials analyzed, will not be shown publicly. Instead, to protect their privacy, I will personally create all the videos used in this research. The creation of these videos involved setting up a green screen to ensure clear visibility and dimensionality of the signs. Proper lighting was arranged, directed from the front to avoid shadows, and a tripod and camera were used to ensure stable, high-quality recordings. These recreated signs maintained clarity while respecting the privacy of the original performers. By adhering to these ethical standards, we uphold the rights and privacy of those whose input is crucial to the richness of our data, ensuring that their participation is both safe and respected.

2.4 Data analysis

The creation and standardization of signs for linguistic terms in LIS involve several critical factors. These include the inherent features of each sign, such as handshape, orientation, location, movement,

and non-manuals. Additionally, the process must consider the principles of neologism creation in sign languages, ensuring that new signs are both intuitive and easily adoptable by the community.

In analyzing the sources highlighted in this chapter, I have identified an extensive array of signs which I have compiled into a series of videos. Therefore, the following section is dedicated to an overview of the existing signs for the selected terms - to facilitate this, I have created ad hoc videos. Screenshots from these videos are included in this thesis, providing a visual reference for each sign under analysis[14]. These static images are accompanied by in-depth explanations that dissect the components of each sign, examining their morphological and phonological features. This analysis will include discussions on why certain signs may be more effective or appropriate than others, considering factors such as clarity, ease of production, and potential for widespread acceptance. These videos serve as a comprehensive visual reference, capturing the full range of signs that I have encountered during my research. However, recognizing the importance of dynamic movement in sign language, the complete videos will be available upon request via link, which will be included in Appendix 2. This ensures that the fluidity and nuances of each sign can be fully appreciated and studied.

In the detailed analyses under each screenshot, I will explore several key aspects of sign language: the configuration of the hands used to produce the sign, including any variations that may occur; the path, direction, and type of movement involved in the sign's production, which is crucial for understanding its meaning and context; and the lexical strategies employed to create new signs or neologisms. These strategies might include borrowing from other languages, modifying existing signs, or creating entirely new signs based on visual or conceptual analogies.

For signs that are compounds, more than one picture will be included to adequately capture each component of the sign. This comprehensive approach allows for a nuanced examination of the signs from various linguistic perspectives, including their handshape, movement, orientation, and location. By analyzing these features, the aim is to understand the underlying principles that make some signs more suitable for academic communication.

The overall goal is to offer a set of well-analyzed, feasible signs that can facilitate better academic communication and enhance the accessibility of linguistic knowledge for LIS users. Through this detailed investigation, the hope is to contribute to the development of a standardized lexicon that can

[14] Available under Appendix 2

be consistently used in the translation of linguistic materials, thereby supporting the educational and research needs of the LIS community.

Through this detailed examination, I aim to contribute to the broader goals of sign language research and education. By documenting and analyzing these signs, I hope to support the efforts to preserve and promote sign languages. This work not only enhances our understanding of the linguistic structure of sign languages but also highlights their cultural and social significance.

By the end of this chapter, readers will gain a comprehensive understanding of the intricacies involved in sign creation and the linguistic richness of sign languages. This analysis will contribute to the ongoing research and educational initiatives aimed at supporting and advancing the field of sign language studies. Through the collaborative feedback process and the meticulous examination of sign language features, this chapter aspires to provide valuable insights and foster a deeper appreciation for the dynamic and evolving nature of sign languages.

2.5 Research methodology

In this section, I will outline the comprehensive methodologies employed to examine the sources for my thesis.

2.5.1 Data Collection Process

The data collection process for both FEAST convention videos and University of Ca' Foscari recordings was methodical and systematic. During the video analysis, I carefully noted specific time stamps corresponding to segments of interest. This step was essential for ensuring accurate documentation and retrieval of relevant data. To facilitate detailed analysis, I recorded the screens and subsequently slowed down the videos. This allowed me to capture the intricate details of the signs, which might have been too rapid to analyze in real-time. Each clip was saved with its corresponding timestamp and a detailed description of the sign, creating a comprehensive catalog of linguistic data.

2.5.2 Organization

The collected materials were systematically organized into separate folders to facilitate efficient access and cross-referencing. The videos were sorted in alphabetical order based on the terms, with each term's folder containing all related clips. Additionally, a master file was created, organizing

terms alphabetically and including references to all related video clips. This organizational structure ensured that the data was easily accessible and well-structured for subsequent analysis and review.

2.5.3 Consultation Preparation

Preparing for consultations with interpreters and consultants was a crucial step in my methodology. To this end, I compiled all the visual materials into another folder, organized alphabetically. This folder was meticulously prepared to ensure that the materials were accessible, well-structured, and ready to be shared with experts. This preparation provided a solid foundation for further analysis and feedback from interpreters and consultants, facilitating a collaborative approach to refining and validating the findings. By following these detailed methodologies, I aimed to ensure a thorough and systematic examination of the sources, maintaining both the integrity of the research process and the privacy of individuals involved. This comprehensive approach not only provided an in-depth analysis of LIS and its specialized linguistic terminology but also adhered to the ethical considerations essential in linguistic research. The methodologies outlined above reflect a commitment to rigorous academic standards and respect for the privacy and contributions of all individuals involved in the research.

2.6 Signs Examination

Following the methodologies described above, the analysis of the signs will be available under Appendix 2. It will delve into the specific signs that resulted from the examination of the materials. To facilitate reading and comprehension, screenshots and descriptions of the sign handshapes, movements, and placements on the body will be included. Due to the nature of the thesis, pictures in the form of screenshots were used; however, to anyone interested, I am also prepared to provide the full set of videos[15]. Appendix 2 aims to offer a comprehensive analysis of the signs, offering visual and descriptive insights into the intricacies of LIS terminology.

[15] https://www.youtube.com/playlist?list=PLMkahx_vVNBZ19IMlbr8hK2fmJK2QEzTe

CHAPTER 3: Insights from a Focus Group: Sign Language Interpretation in Academic Settings and Comparative Lexicon Analysis.

3.1 Focus group

As was anticipated, this section delves into the insights gained from the focus group conducted with VEASYT. The focus group provided a platform for in-depth discussions with professional interpreters, shedding light on several key aspects of sign language interpretation. We will explore the major issues and facts that were brought up during these discussions, particularly focusing on the application of sign language interpretation in academic settings. The insights from VEASYT are crucial for understanding the practical challenges and strategies employed by interpreters to ensure effective communication between Deaf and hearing individuals in educational contexts. This section aims to highlight the interpreters' decision-making processes, the adaptation of signs for technical terminology, and the collaboration with the Deaf community to maintain linguistic integrity and cultural relevance.

3.1.1 Focus Group Methodology

Prior to the focus group meeting, interpreters received video materials containing linguistic terms along with all existing varieties and possibilities for those terms in LIS. They were asked to review these videos and provide their impressions and feedback during the focus group. Although the interpreters did not give definitive answers—acknowledging that the final decision rests with the Deaf community—they provided valuable input and perspectives. Their contributions were crucial in identifying issues and challenges faced during interpretation and recognizing the most popular and widely accepted signs within the Deaf community.

3.1.2 Decision-Making Process for Technical Signs

One of the critical discussions in the focus group revolved around the selection of technical signs. Interpreters emphasized that their choices are influenced by several factors, including the student’s level, the course content, and the number of lessons previously interpreted for that student and course. They described a decision-making process that involves careful consideration of context, coherence, and effectiveness.

For instance, the interpreters explained that when selecting signs for a beginner-level course, they tend to use more widely recognized and simpler signs to ensure comprehension. In contrast, for advanced courses, they might employ more specialized signs that align with the technical jargon of the subject matter. This adaptability ensures that the interpretation remains accessible and relevant, regardless of the complexity of the course material.

3.2 Origin and Adaptation of Signs

The focus group shed light on the origin of the signs used. Some signs are preexisting in LIS but are being transferred from general use to specialized terminology. When adapting existing LIS signs for more specific technical terms, interpreters follow certain criteria to ensure the signs remain effective and coherent. This adaptation often involves a balance between maintaining the original sign's integrity and adjusting it to fit new linguistic concepts. Interpreters agree on the fact that at times this is not the most appropriate and precise rendition of a term, however the key point is always clarity and communication efficiency.

In regard to this, interpreters discussed the sign used for AGREE - they use the citational form of AGREE to express spatial/verbal/nominal agreement, though they admit it is not entirely suitable for conveying a specific linguistic concept. This demonstrates the use of an existing LIS sign being repurposed as a linguistic term due to the lack of a preexisting LIS term for this particular concept. They exclude the use of alternative variants, emphasizing that interpreters do not invent signs if they do not know them. Instead, they resort to other strategies such as fingerspelling, periphrasis, or literal translation. Interpreters insist on always using signs provided to them by deaf students or the Deaf community, ensuring authenticity and acceptance.

3.2.1 Creation of New Signs

Interpreters do not take on the responsibility of creating new signs themselves, as they are mindful of the ethical implications and the need to respect the linguistic and cultural integrity of the Deaf community. Instead, the process of inventing new signs is primarily driven by the Deaf community members, who develop signs that best represent their needs and experiences. Once these new signs are created, interpreters play a crucial role in assisting with their dissemination and standardization.

The interpreters support the Deaf community by helping to spread awareness and usage of these new signs. They do this through various channels, such as incorporating the new signs into their interpretations, conducting workshops, and providing training sessions for other interpreters and Deaf individuals. This ensures that the new signs gain widespread acceptance and usage, facilitating better communication and understanding across different contexts.

This collaborative approach not only preserves the authenticity of the signs but also leverages the interpreters' expertise to promote consistent and effective communication. By working closely with the Deaf community, interpreters help to ensure that the new signs are practical, intuitive, and meet

the linguistic needs of all users. This partnership fosters a dynamic and responsive sign language that evolves with the community while maintaining its cultural and linguistic integrity.

3.3 Signs Used by Interpreters: A Linguistic Exploration

In this section the feedback from the interpreters on all the specific signs is gathered. The focus group with LIS interpreters delved into the signs commonly used in the field of Linguistics. Below are the signs that the interpreters deemed as more "popular" and used within the community. Their reflections were translated from Italian to English, furnished with the screenshots of the signs deemed as more pertinent[16].

1. ADJECTIVE:

This sign combines the sign for noun (H-open) with the sign for "TO ADD" placed on top of it. This construction method effectively conveys the concept of adding an attribute or a modifying element to the noun.

2. ADVERB:

[16] In this section only the signs deemed as more pertinent by the interpreters will be included. The analysis may refer to other versions of the sign, to review those refer to Appendix 2.

The most popular sign features the non-dominant hand in a 5-closed handshape and the dominant hand in a 5-flat-closed handshape, incorporating the sign for "ADD." However, a noteworthy point was raised regarding the construction of an adverb[17]. A possible alternative for this sign - closer to the semantic content of the term - involves combining a sign for VERB (such as V-open) with the sign for "TO ADD" positioned on top of it. This approach highlights the dynamic nature of LIS, where signs are adapted and combined to accurately convey complex grammatical concepts.

3. AGENT NOUN:

The sign combines the sign for "MOVEMENT" with the classifier with 5-flat-closed handshape to effectively indicate both human and non-human agents. This approach ensures that the sign is versatile and unambiguous, clearly differentiating between various types of agents involved in the action. By integrating the classifier, the sign achieves greater specificity and clarity, enhancing its communicative effectiveness within LIS.

[17] To see the definition refer to Appendix 1

4. AGREEMENT:

Interpreters have reached a consensus on using the citational form of the sign for AGREE, though they acknowledge that this sign may not fully capture the nuanced linguistic concepts it is intended to represent. This practice highlights a common challenge in the field - the necessity to repurpose existing LIS signs in the absence of specific terms for certain linguistic phenomena. The reliance on repurposing underscores the adaptability and resourcefulness of interpreters, yet it also points to a significant gap in the lexicon that needs addressing. The second variant of the sign is generally avoided, as it does not function as a directional verb, which is a crucial aspect for accurately conveying the intended meaning in a linguistic context.

5. ARGUMENT:

The sign combines the sign for “ARGUMENT” with a classifier with 5-flat-closed handshape. The sign for “ARGUMENT” alone is insufficient, as it could easily be confused with another linguistic

term, “THEMATIC”[18]The use of the classifier is particularly effective because it can represent both human and non-human referents, adding a layer of specificity and avoiding potential ambiguities. This dual approach ensures a clearer and more precise communication of the intended concept within LIS.

6. ASSIMILATION:

Requires further consultation by Deaf Consultants.[19]

7. CASE:

Interpreters currently use the sign for *situation* due to the absence of a specific sign for *case*. While they acknowledge that this substitution may not be ideal and might not capture the precise nuances of *case,* they employ it as a practical workaround. Recognizing the limitations of this approach, interpreters actively seek input from linguistic consultants and native signers to develop a more accurate and contextually appropriate sign. This proactive engagement underscores the commitment to improving the clarity and specificity of LIS terminology, ensuring that it meets the evolving needs of its users.

8. COMPOUND:

[18] To see definition refer to Appendix 1

[19] One crucial part of the translation of part of LIS grammar by Sign-Hub will be the consultation with Deaf linguists.

The initial variant is deemed satisfactory. Linguistic experts observe that the identical sign is occasionally employed for both spoken and written languages, highlighting the critical requirement for distinct and separate lexicons for each language modality.

9. COORDINATION

The sign is depicted by two intertwined ‘F’ handshapes, which move horizontally from right to left in a repeated motion. This repetitive movement visually emphasizes the interconnected nature of the concept being conveyed, enhancing the clarity and effectiveness of the sign.

10. DECLARATIVE CLAUSE:

It combines the sign for “SENTENCE” with “TO DECIDE”.

11. HANDSHAPE:

LIS chooses the handshape portrayed in the picture, deliberately avoiding the use of the international sign variant. The sign is intricately described as comprising an 'mnd' hand configuration, which involves an arc movement around the 'md a s' handshape. This specific articulation underscores the nuanced differentiation within sign language variations and the precision required for accurate communication.

12. CLAUSE

A similar distinction is observed with the sign for "clause," which is performed using both the F-flat-open handshape and the 3-handshape. The F-flat-open handshape indicates a clause in vocal languages, while the 3-handshape signifies a clause in sign languages. However, further confirmation is required to ascertain the community's acceptance of this distinction.

13. DEPENDANT CLAUSE:

This is the sign that appears more prevalent, with a slight preference for 5-flat-closed handshape.

14. ICONICITY:

For what concerns LIS, the dom hand starts at the eye and reaches the n-dom hand which is in 5-open handshape - this conveys the idea of iconicity. In international sign, the sign for COPY is performed on the palm of the n-dom.

15. LEXICON:

Regarding lexicon, LIS employs a strategy similar to that of other signs to distinguish whether a term pertains to vocal or sign language contexts. For vocal language contexts, the sign is executed as depicted in the screenshot above. In the context of sign languages, the sign is performed with the dominant hand in the 3-handshape, moving downward along the upper arm of the non-dominant hand, which is also in the 3-handshape. This specific handshape is utilized for the signs SIGN or TO SIGN, thereby differentiating between general lexicon and LIS-specific lexicon.

16. MAIN CLAUSE:

This is the most accredited version.

17. MORPHOLOGY:

The general sign for "Morphology" is currently represented by the sign for "Shape." In LIS, there remains some uncertainty, as there is not yet a specific sign designated for "Morphology." Consequently, the sign for "Shape" is used in its place. Input from consultants is necessary to develop a specialized term.

18. MORPHOSYNTAX

To be defined based on morphology and syntax, therefore further consultation is required.

19. MOVEMENT:

The choice of sign depends on whether the discussion pertains to movement as a phonological parameter or syntactic movement.

24. NEGATION

The most pertinent sign is the one illustrated in the screenshots, as other variants, such as the one with the G handshape, could be misinterpreted as a specific negation rather than the general concept of negation.

20. OBJECT

LIS utilizes a classifier that is commonly associated with both human and non-human entities to signify OBJECT. Optionally, LIS incorporates an additional layer of disambiguation through the initialization strategy. This sequential approach is deliberately chosen to prevent confusion with the sign for SUBJECT, which also uses the same classifier handshape. One important consideration is that the classifier CL used for OBJECT and SUBJECT in LIS is also utilized for PATIENT and

AGENT. This overlap can lead to considerable ambiguity, as the same classifier can represent different grammatical roles depending on the context. To address this ambiguity, LIS relies heavily on contextual cues and additional linguistic strategies. These strategies may include modifying the sign's location, orientation, or movement, as well as incorporating manual and other non-manual markers to provide disambiguation. Such linguistic techniques are essential for ensuring clear and precise communication, allowing signers to convey complex syntactic relationships effectively despite the potential for overlapping classifiers.

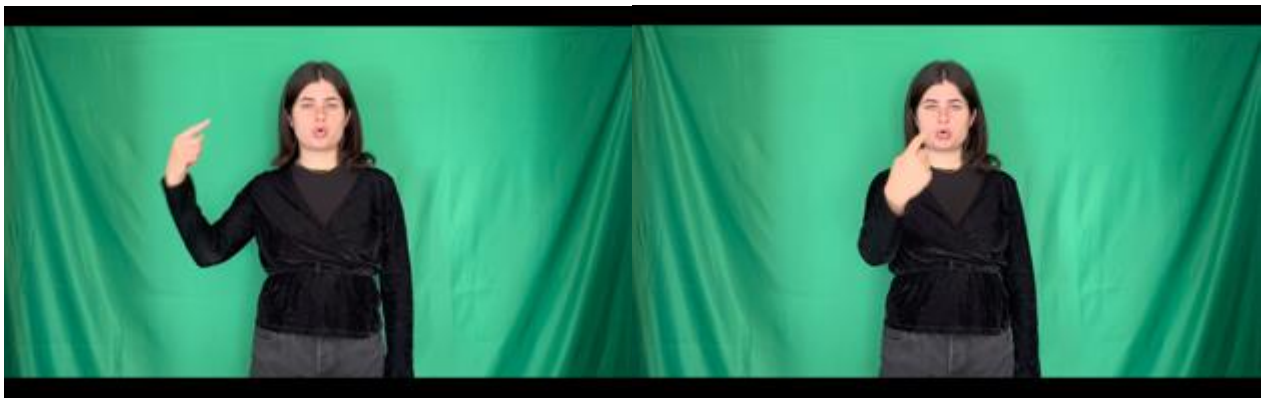
21. PHONEME:

Combines the sign for Phonology with the classifier L-flat-open used for entities of small proportions.

22. PHONETICS:

In the context of sign languages, the sign begins with the non-dominant hand in a '3' handshape position, which is the same handshape used for the sign 'SIGN' or 'TO SIGN.' This distinguishes the phonological aspects of sign languages from vocal languages. For the latter, the sign originates at the throat.

23. PHONOLOGY:



In LIS, the dominant hand index finger initiates its movement from a position just below the eye. Conversely, in vocal language, the starting point for the index finger of the dominant hand is located at the ear. This distinction in the point of origin for the same sign emphasizes the importance of precise starting positions in conveying accurate meaning within different kinds of languages.

24. PLURAL:

The sign generally used is the one for MUCH/MANY; occasionally, the sign for NUMBER is employed, depending on the specific context. Consultation with experts is required to ensure accurate usage.

25. RELATIVE CLAUSE:

Further consultation is needed as there are more variants circulating in the community.

26. SINGULAR:

The preferred sign utilizes either the G or S handshape in neutral space, as the variant performed on the center of the chest can be ambiguous. Placing the sign on the body of the signer can lead to confusion, especially if the subject is a third party, non-human, or inanimate, making the sign appear strange in these contexts.

27. SUBJECT

As was said under OBJECT, the same classifier is used for both "SUBJECT" and "OBJECT" in LIS, as it represents both human and non-human entities. However, to disambiguate between these two concepts, LIS can initialize the sign for "SUBJECT," followed by the classifier with a 5-flat-closed handshape in the post-position.

28. SYNTAX

LIS makes a distinction between syntax in the realm of sign languages and vocal languages. For sign languages, the sign for syntax is performed using the 3 handshape, which is also commonly used for the signs SIGN or TO SIGN. This choice of handshape emphasizes the connection to the manual modality of sign languages. Conversely, when referring to syntax in vocal languages, LIS uses the V or 2 handshape. This differentiation ensures clarity and avoids confusion between the two modalities, highlighting the specific context in which the term "syntax" is being used.

3.4 Balancing Linguistic Fidelity and Conceptual Clarity: Crafting Specialized Terminology in LIS

After an open dialogue with interpreters and LIS educators one rather important was raised - how should we construct specialized terminology to convey linguistic concepts within specific domains? This dilemma lies at the heart of the exploration as this research delves into the intricacies of developing sector-specific signs in LIS. The journey involves striking a delicate balance - for the sake

of clarity and accessibility, should specialized signs closely mirror Italian words, maintaining a direct link to spoken language? Or should they be conceptually independent, transcending any explicit connection to Italian vocabulary? Each approach carries implications for both linguistic precision and accessibility.

1. Word-Referential Signs:
    - **Pros:** These signs directly correspond to Italian words, facilitating comprehension for bilingual users proficient in both LIS and Italian.
    - **Cons:** However, word-referential signs may limit LIS's expressive capacity, especially when dealing with concepts lacking direct Italian equivalents. Additionally, reliance on Italian vocabulary could hinder LIS's autonomy as a distinct language.
2. Conceptual Signs:
    - **Pros:** Conceptually independent signs allow LIS to express nuanced linguistic ideas without relying on Italian lexemes.
    - **Cons:** While initially challenging for bilingual users, these signs can become naturalized within the LIS community over time.

CHAPTER 4: Comparative Analysis of Linguistic Choices in IS and LIS Interpretation of Specialized Linguistic Terminology

Interpreting specialized linguistic terminology presents unique challenges and opportunities for both interpreters of LIS and IS. This section aims to explore how interpreters navigate these challenges, comparing the linguistic choices made in both languages. By examining the signs used and the strategies employed, insights into the similarities and differences between LIS and IS in handling specialized language within the field of linguistics can be gained.

The analysis is based on the corpus of specialized linguistic terms sourced from FEAST 2020[20] and LIS lessons[21] and their corresponding signs in both LIS and IS. By scrutinizing the form, structure, and semantic content of these signs, it is possible to identify patterns and divergences. Additionally, it offers an opportunity to explore the interpretive strategies, such as metaphorical usage, borrowing, employment of classifiers, use of space, to understand how complex linguistic concepts are conveyed.

4.1 Comparing Standardization and Complexity in LIS and IS

The degree of standardization also varies between LIS and IS. IS, designed for international communication, tends to have more uniform signs for specialized terms. This standardization facilitates understanding across different sign language communities. In contrast, LIS, being a national language, may exhibit regional variations in signs, reflecting the rich diversity within Italy's Deaf community.

Another difference lies in the complexity and simplification of signs. IS often simplifies concepts to accommodate a broader, international audience. This simplification can sometimes result in a loss of specificity. Conversely, LIS might employ more intricate and nuanced signs, leveraging the shared cultural and linguistic background of its users to convey detailed information effectively.

4.1.1 Linguistic Strategies

Moving to a more specific perspective, one similarity between LIS and IS is the use of **iconicity**[22]. Both languages often rely on signs that visually represent the concepts they denote. For instance, the sign for COMPOUND might involve strategies that illustrate the arrangement of elements, reflecting

[20] See paragraph 2.3.1 FEAST 2020
[21] See paragraph 2.3.2 LIS lessons.
[22] This aspect is common to all sign languages.

the structural nature of compounding itself. This iconicity helps bridge the gap between abstract concepts and tangible representations, making the interpretation more intuitive for the audience.

The **use of classifiers** is another shared strategy[23]. Classifiers are versatile signs that convey detailed information about spatial relationships and the physical characteristics of objects. In both LIS and IS, classifiers play a crucial role in encapsulating complex ideas more succinctly.

The strategies employed by interpreters in both languages reveal a blend of common approaches and unique adaptations. **Metaphorical signs** are also a prevalent strategy. Both LIS and IS use metaphorical signs to explain abstract linguistic concepts. For instance, the sign for SYNTAX might involve arranging elements in space to metaphorically represent sentence structure, making the abstract notion more concrete and comprehensible.

Fingerspelling and initialization are also widely used, particularly for newly introduced or highly specialized terms. When interpreters encounter a term without an established sign, they might resort to fingerspelling or initializing, using the first letter of the spoken term. This strategy maintains clarity and ensures that the term is accurately conveyed.

Calquing, or creating new signs that mirror the structure and form of spoken terms, is another common strategy. By calquing, interpreters ensure that the new sign is easily learnable and recognizable, facilitating smoother communication and comprehension.

Another strategy is **borrowing**, both from other sign languages, but also from one's own language terms that are of everyday use, but in the absence of a specific term, can be used as specialized terminology as they acquire new meaning.

4.2 Comparative Analysis

This section will conduct a detailed examination of the signs used in both languages. The analysis will involve a phonological comparison and the application of specific parameters to each sign. By doing so, the aim is to identify and highlight the possible similarities and differences between LIS and IS in their handling of specialized linguistic terminology.

To provide a comprehensive comparison, the following steps we taken:

[23] This aspect is common to all sign languages.

1. **Analyze the Phonological Structure**: Phonological elements of each sign, focusing on handshape, movement, location, orientation, and facial expressions will be dissected. This analysis will allow us to understand the fundamental building blocks of each sign and how they are employed in LIS and IS.
2. **Identify Patterns and Variations**: Through phonological and parameter-based analysis, patterns that are consistent across both languages as well as variations that are unique to each will be identified. This will help to understand the linguistic choices made by interpreters and how these choices impact the clarity and effectiveness of the interpreted message.
3. **Highlight Interpretive Strategies**: Strategies used by interpreters in both LIS and IS to convey specialized linguistic concepts will be examined. This includes the use of metaphorical signs, borrowing, classifiers, and fingerspelling. By understanding these strategies, it is possible to gain insights into the adaptability and creativity of interpreters in both languages.

The phonological analysis of Italian Sign Language (LIS) and International Sign (IS) will be carried out through the use of detailed charts. These charts will be made available to the reader in **Appendix 3**. These charts will enable a clear and comprehensive visualization of the similarities and differences between the signs of both languages.

Each chart will systematically present the following phonological parameters for both LIS and IS:

1. **Handshape (HS):** The configuration of the fingers in both the dominant (dom) and non-dominant hands (n-dom).
2. **Place of articulation (POA):** The spatial position where the sign is articulated relative to the body.
3. **Movement (MOV):** The type and direction of motion involved in producing the sign, including repetition and contact points.
4. **Orientation (OR):** The orientation of the palms and fingers during the sign articulation.
5. **Non-manual markers (NMMs):** Any accompanying facial expressions, body movements, or other non-manual cues that are integral to the sign. These will be included under “dom”.

Other abbreviations that will be used are:

++= repeated movement

^= compound (es. 5-closed^5 flat-closed)

>= when there is a transition within the sign (for example 5-flat-closed>5-open)

_= overlapping of different elements

(xxx)= the sign can present with it but also optionally without it.

R= right

L= left

DOG (1)= with a number between brackets it means that more than one sign is available for that term

D-O-G= the dash is used for fingerspelled words

X= used in the absence of relevant elements

Here an example of the chart structure:

LIS/IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom					
n-dom					

By organizing the phonological components in this manner, the charts will facilitate a side-by-side comparison, making it easier to visualize both the commonalities and distinctions between the signs in LIS and IS. This approach ensures that the analysis is thorough and accessible, providing clear insights into the phonological structure of the signs in each language.

4.2.1 Summary of findings

For a detailed analysis of the signs, refer to Appendix 3, which includes linguistic analysis charts and a phonetic analysis. Below is a summary of the findings from these examinations:

AGREEMENT: Both LIS and IS utilize similar handshapes and movements to convey the concept of agreement, effectively leveraging the iconic nature of sign languages. This demonstrates a common linguistic strategy of borrowing non-specific terms from everyday language and adapting them for specialized contexts.

AGENT NOUN: LIS uses compounding with classifiers to represent human and non-human referents, while IS uses initialization for the term "NOUN." This distinction underscores different strategies to denote the same concept.

ADJECTIVE: Both languages employ initialization to distinguish "ADJECTIVE" from "ADVERB." Additionally, LIS uses compounding with the sign "ADD" and sometimes omits the initial initialization.

ARGUMENT: IS employs partial fingerspelling and full mouthing of "ARGUMENT," whereas LIS uses a citational form and classifiers for a more specialized meaning.

ASSIMILATION: Both LIS and IS utilize metaphorical meanings in their signs, reflecting the conceptual understanding of assimilation within sign languages.

ACTIVE VERB: Both languages use compounding, combining the citational form of "ACTIVE" with "VERB" in post-position, illustrating a shared method for constructing complex terms.

CLASSIFIER: Initialization is a common strategy in both LIS and IS for classifiers, indicating a standardized approach to sign formation in this context.

COMPOUND: The identical signs for "COMPOUND" in LIS and IS, involving the convergence of two elements, emphasize the iconic representation of the concept in both languages.

HANDSHAPE: Despite variations in the non-dominant hand's handshape, both languages use similar signs where the dominant hand accentuates the shape of the non-dominant hand, indicating a shared visual strategy.

DEPENDANT CLAUSE: LIS uses different handshapes to convey dependency through positioning and movement, while IS positions the hands one beneath the other, reflecting a metaphorical sense of the term.

DOMINANT HAND: Both languages incorporate the same sign for "DOMINANCE" and their respective signs for "HAND," demonstrating a consistent approach to sign construction.

ICONICITY: The use of similar handshapes for the non-dominant hand in both languages effectively conveys the semantic concept of "picture" or "image," showcasing the iconic nature of sign languages.

LEXICON: Both LIS and IS use the same sign for "LEXICON," with a preference for vertical movement due to its iconic representation of a dictionary format.

HEAD NOUN: The direct reference to the head in both languages reinforces the semantic content of "head noun," followed by their respective signs for "noun," ensuring clarity and hierarchical structure.

MARKER: LIS uses a highlighting action with a handshape reminiscent of a highlighter, while IS employs an H handshape with repeated movement to signal relevance and importance, emphasizing visual saliency.

MORPHEME: LIS uses compounding to visually connect to the concept of a morpheme, while IS uses a less iconic single sign but maintains the same handshape for the small entity, highlighting different visual strategies.

MORPHOLOGY: The etymological roots of "morphology" guide LIS to use a sign for "SHAPE," while IS uses a similar sign to "MORPHEME" with different classifiers, effectively communicating conceptual distinctions.

MOVEMENT: LIS uses different signs for general and syntactic movement, reflecting a nuanced approach, whereas IS maintains a consistent sign across contexts.

NEGATION: LIS and IS employ different strategies for negation due to preexisting idiomatic signs in LIS, highlighting the importance of context in sign language.

OBJECT: IS uses initialization and lexical mouthing for clarity, while LIS utilizes classifiers and additional initialization to distinguish between "OBJECT" and "SUBJECT," ensuring precise communication.

PHONOLOGY: LIS differentiates between general phonology and sign language phonology with specific handshapes, while IS has its own specialized term, reflecting tailored adaptations.

PLURAL: LIS employs the citational form of "MANY" for plurality, while IS uses a counting-like motion to indicate multiple elements, showcasing different visual strategies for the same concept.

RELATIVE CLAUSE: IS uses initialization, while LIS employs compounding with intertwined handshapes, effectively conveying relational connections.

SALIENCY: Both languages use similar visual strategies with different handshapes to emphasize relevance and prominence, highlighting metaphorical saliency.

SEMANTIC: LIS adapts a common sign for specialized terminology, while IS uses a specific sign similar to "MORPHOLOGY," linking the two concepts visually and kinetically.

SINGULAR: Both languages use the handshape for the number one with a trembling movement to convey singularity and individuality, emphasizing abstract notions over concrete elements.

SUBJECT: LIS differentiates "SUBJECT" from "OBJECT" through initialization and classifiers, while IS uses initialization and lexical mouthing, ensuring clarity and distinction.

TOPIC: Both languages use the same sign for "TOPIC" with non-manual markers such as raised eyebrows and wide-open eyes, effectively indicating topicalization.

WH-QUESTION: LIS and IS both use fingerspelling (W-H) followed by a sign representing a question mark, visually conveying the concept of a question.

4.2.2 General Reflection on Linguistic Strategies in LIS and IS

The comparative analysis of LIS and IS reveals an interplay of linguistic strategies that both languages employ to convey complex concepts. While the resulting signs may sometimes differ, it is evident that similar underlying strategies are often at work. In some cases, the signs are even identical, underscoring a shared visual-spatial approach to language. This convergence is rooted in:

1. **Adaptability**: Both languages show remarkable adaptability in borrowing and modifying general signs for specialized contexts. This adaptability allows for the creation of precise and contextually appropriate signs.
2. **Clarity and Disambiguation**: Strategies like initialization and compounding are employed to ensure clarity and prevent ambiguity. These strategies are essential in differentiating between closely related concepts and providing clear communication.
3. **Emphasis on Visual Logic**: The use of iconicity and non-manual markers highlights the emphasis on visual logic. Signs are often constructed to visually mirror the concepts they represent, making them intuitive and easy to understand.
4. **Cultural and Linguistic Contexts**: While some signs differ due to cultural and linguistic contexts, the strategies employed are remarkably similar. This points to a shared cognitive approach in utilizing the visual-spatial modality of sign languages.

In conclusion, the linguistic strategies in LIS and IS reveal a profound interconnectedness in how visual languages operate. Even when signs differ, the foundational strategies of initialization, compounding, non-manual markers, and iconicity demonstrate a shared commitment to clear, effective, and visually logical communication. The instances of identical signs further reinforce the universal principles underlying sign language structure and usage.

CONCLUSIONS

The success of any linguistic innovation lies in its acceptance by the community it serves. My work is only laying the basis for a linguistic transformation that will take time, but the crucial step is gauging the response of the LIS community. It is therefore essential to assess how the Deaf community reacts to the proposed signs and terminological choices. Community feedback ensures that the signs not only meet linguistic standards but also resonate with users, aligning with their cultural context and practical needs. Furthermore, this approach fosters a sense of ownership and acceptance of the standardized terms, promoting their widespread adoption.

LIS, a rich and expressive visual language, grapples with a crucial question: how should we construct specialized terminology to convey linguistic concepts within specific domains? This dilemma lies at the heart of our exploration as we delve into the intricacies of developing sector-specific signs in LIS. The journey involves striking a delicate balance between fidelity to spoken Italian and conceptual clarity. We encounter a fundamental choice between word-referential signs and conceptual signs, each carrying implications for linguistic precision and accessibility. Word-referential signs directly correspond to Italian words, facilitating comprehension for bilingual users proficient in both LIS and Italian but potentially limiting LIS's expressive capacity and autonomy. Conversely, conceptual signs allow LIS to express nuanced linguistic ideas independently of Italian lexemes, though they may initially challenge bilingual users but can become naturalized within the LIS community over time.

To effectively navigate this complex terrain, it is imperative to meet with experts, including deaf linguists, native signers, LIS consultants, and other relevant stakeholders. Such a gathering would serve multiple purposes – experts can scrutinize the proposed signs, assessing their linguistic fidelity and conceptual clarity. Additionally, balancing word-referential and conceptual signs is a nuanced task that requires informed discussion. Experts can weigh the pros and cons of each approach. By incorporating diverse perspectives, the goal is to reach a consensus that respects both linguistic principles and community preferences. In summary, creating specialized LIS terminology necessitates thoughtful deliberation and inclusive dialogue. As we progress, it is crucial to honor the richness of LIS while ensuring its relevance in contemporary linguistic discourse.

Cultivating a specialized linguistic lexicon for LIS is vital for ensuring consistency in the domain of LIS grammar and for the broader goals of sign language research and education. A standardized lexicon facilitates clearer communication among researchers, educators, and students, thereby enhancing the quality of educational resources at hand. It supports ongoing efforts to document and

promote LIS, contributing to its preservation and appreciation as a rich and vibrant linguistic system. Ultimately, this effort contributes to the broader mission of preserving and promoting sign language diversity and enhancing the accessibility and quality of sign language schooling and research.

The development of a standardized lexicon is just the beginning. Future research should continue to engage the community to refine and expand the lexicon, ensuring it evolves with the language and its users. Moreover, integrating technological advancements, such as digital databases and mobile applications, can further support the dissemination and utilization of specialized terms. Fostering international collaborations can also help share best practices and insights, enriching the lexicon and its application. As sign languages worldwide face similar challenges, collective efforts can drive global advancements in sign language standardization and education.

In conclusion, establishing a specific lexicon for LIS is a foundational step toward enhancing linguistic consistency, supporting educational initiatives, and preserving the linguistic heritage of the LIS community. By combining rigorous linguistic analysis with active community involvement, this project not only addresses immediate needs but also paves the way for future growth and development in the field of sign language studies. This holistic approach ensures that the lexicon is not only a tool for today but a lasting resource for generations to come. While the need for standardization in sign language linguistics is clear, it also presents a significant opportunity for growth in academic discourse. This research aims to set the groundwork for a more systematic and scientific approach to linguistics, enhancing the field's rigor and expanding its horizons. By embracing both standardization and innovation, we can ensure that sign language studies remain dynamic, inclusive, and forward-thinking.

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APPENDIX 1

List of terms from SIGN-HUB

Presented below are the selected terms under analysis, directly sourced from SIGN-HUB[24], along with the corresponding explanation, directly gathered from SIGN-HUB Grammar:

Adjective

An adjective is a lexical element that typically specifies a property and that can modify a noun (e.g. clean, red in English).

Adverbial

An adverbial is a constituent that is simplex or complex in form and that functions as an adverb; sometimes used interchangeably with simplex adverb.

Agreement

Agreement is an asymmetric relation between two or more constituents, by which one inherits the formal features of the other. For example, in the sentence 'Girls now are moving forward', the copula BE agrees with the subject 'girls' in number (plural) and person (third). This syntactic relation is morphologically expressed in English through verbal inflection, hence the form 'are'. In sign languages, agreement is often expressed through spatial modification.

Argument

An argument is a constituent that completes the meaning of a predicate. Most predicates take one, two, or three arguments. For example, the verb 'to run' takes one argument (the subject, as in 'Ada runs'); the verb 'to destroy' takes two arguments (the subject and the object, as in 'the typhoon destroyed the beach'); the verb 'to send' takes three arguments (the subject, the object and the indirect object, as in 'Ada sent a present to her brother'). Arguments are often associated to verbs, but other syntactic categories can take arguments as well, or select them. For example, the noun 'destruction' can be said to select two arguments, as in 'the destruction of the beach by the typhoon', or the Adjective 'proud' can be said to select two arguments, as

[24] https://thesignhub.eu/grammar/lis?tag=824

in ‘Nico (is) proud of Ada’. Arguments must be distinguished from adjuncts, which are never selected and thus optional.

Assimilation

Assimilation is a phonological process whereby the form of a phoneme is influenced by properties (features) of an adjacent phoneme; if the source of assimilation precedes the target, we speak of progressive assimilation, if it follows the target, we speak of regressive assimilation.

Borrowing

Borrowing refers to the integration of a lexical item or expression from one language into the lexicon of another language (e.g. German borrowing English computer); borrowed elements may undergo certain phonological changes.

Classifier

Generally, a classifier is a morpheme that reflects certain semantic properties of a referent; for sign languages, a classifier is a visually motivated (iconically based) lexical/grammatical category, mostly a handshape that combines with certain types of predicates.

Compounding/Compound

Compounding is a word formation process by which two otherwise independent stems or words come together to form a new item with a new meaning; the result is a compound.

Coordination

Coordination is a non-hierarchical combination of at least two constituents belonging to the same syntactic category, such as noun phrases, verb phrases or clauses, either through conjunction or juxtaposition

Declarative

Declaratives are the most common type of sentences in any given language. They are used to express statements, to make something known, to explain or to describe. As a sentence type, they are usually opposed to interrogatives, imperatives and exclamatives. The corresponding

declarative force is specialized to provide new information. Declaratives are typically used to realize assertional speech acts.

Head of a word

The head of a word is the element which provides the label for the categorial status of a word or compound, thus determining whether it is a noun, verb etc. The concept of head presupposes asymmetrical (head-complement or head-modifier) structures.

Iconicity

Iconicity implies a non-arbitrary (motivated) relation between form and meaning, i.e. a phonological form reflects in some way the assumed visual (or auditory) characteristics of the entity or event it refers to; the form of the category/construction is then iconic.

Lexical item

A lexical item is any item that is part of the vocabulary of a particular language, and that has to be learned in order for the language to be used.

Lexicalization

Lexicalization refers to the adoption of a particular form into the lexicon of a language; the form can be a completely novel form, or might be based on previously existing items.

Lexicon

The lexicon is the mental repository of all the vocabulary items of a language.

Locus

A locus is a point in space used for grammatical purposes (e.g. pronominalization, agreement); it either is the actual location of a present discourse referent or an arbitrary location established by means of pointing or some other strategy.

Main clause

The main clause of a sentence, also called the independent clause, is a clause that is syntactically and semantically autonomous. It is thus opposed to the subordinate clause, which is syntactically and semantically dependent on the main clause.

Minimal pair

Two lexemes that differ from each other only in terms of a single distinctive feature, a single phoneme in spoken languages (e.g. bat and matt in English) or a single parameter in sign languages.

Morpheme

A morpheme is the smallest linguistic unit that bears meaning; it can be free (i.e. standing on its own) or bound (i.e. morphologically dependent on a stem/base and unable to be used on its own).

Morphosyntactic feature

Morphosyntactic features (also called grammatical features) are the categories of declension and conjugation (e.g. number, tense, etc.) which carry grammatical information and enable a word to be used in a particular syntactic context.

Negation

Negation is a semantic notion which is encoded by dedicated morphemes. Negation systematically changes the meaning of expressions by introducing various kinds of oppositions. Negating a proposition has the effect of reversing its truth value, i.e. of the two clauses Tim is at home and Tim is not at home, only one can be true. By contrast, constituent negation only affects the constituent in the scope of negation

Non-dominant hand

The non-dominant hand is the non-preferred hand of a signer, i.e. the hand s/he would normally only use in the articulation of two-handed signs.

Non-manual (marker)

A non-manual marker is a lexical or information-bearing unit which is expressed by articulators other than the hands; non-manual markers can have phonological, morphological, syntactic, and prosodic functions.

Parameter

Parameters are the phonological components (building blocks) of a sign: handshape, orientation, location, movement, and non-manuals.

Passive

In a passive construction the patient (or theme) argument of a transitive or a ditransitive verb is in the subject position, the agent argument is absent or expressed optionally, and the verb or the verb phrase is marked in a special way.

Plural

One of the values of the category number, indicating that there is more than one of an entity.

Pronoun

A syntactic category that takes the place of a noun phrase (e.g. English I, him, mine, etc.)
Personal pronouns are pronouns that are associated primarily with a particular grammatical person – first person (as I), second person (as you), or third person (as he, she, it). Personal pronouns may also take different forms depending on number (usually singular or plural), natural gender, case, and formality. Semantically, pronouns are used as cohesive devises to establish co-reference between the referent of the pronoun and the referent of its antecedent.

Quantifier

A syntactic category that indicates quantity (excluding numerals), e.g. some, many, never. Semantically, quantifiers are operators that quantify over a set of individuals, with different interpretations depending on the meaning of the quantifier.

Reference

Reference is the symbolic relationship between a linguistic expression and a concrete or abstract entity that it represents. The reference of an expression is the set of entities that the expression denotes.

Role shift

A construction where a signer assumes the characteristics of another person/animal (the character) and linguistically marks his/her utterance accordingly, commonly by rotating his/her body towards the position in space associated to the character (and by other non-manual

markers); role shift is typically used in narration to report someone else's utterance (attitude role shift, also called constructed discourse) or action (action role shift, also called constructed action).

Subordination

Subordination is a principle of hierarchical organization of linguistic constituents. More precisely, the constituent A is said to be subordinate to the constituent B if A depends on B.

Thematic role

Thematic roles encode the general semantic interpretation of an argument as a specific participant in an event/action described by the predicate. Typical thematic roles are agent, stimulus, experiencer, patient, theme, benefactive, recipient or instrument.

Topic

If the content provided by the sentence can be divided in old information and new information, a topic is the constituent that the rest of the sentence talks about. A topic can be a constituent familiar from the previous sentence but it can be a new argument of conversation. The latter case involves so-called topic shift and is a way to switch to another topic in discourse.

Wh-question

Content interrogatives or wh-questions are used to ask the addressee to fill in some specific missing information and thus elicit a more elaborate answer than just 'yes' or 'no'. In many languages, they contain a specialized set of interrogative words or phrases that have a common morphological marking (what, which, who, why, when etc.). Since in English this marking is the morpheme wh-, these interrogative phrases are called wh-phrases, and content interrogatives are often called wh-questions.

APPENDIX 2

FULL SET OF VIDEOS:
https://www.youtube.com/playlist?list=PLMkahx_vVNBZ19IMlbr8hK2fmJK2QEzTe

Abbreviation for parameters:

Handshape (HS)

Place of Articulation (POA)

Movement (MOV)

Orientation (OR)

Non manual markers (NNM)

Other abbreviations that will be used are:

++= repeated movement

^= compound (es. 5-closed^5 flat-closed)

>= when there is a transition within the sign (for example 5-flat-closed>5-open)

_= overlapping of different elements

(xxx)= the sign can present with it but also optionally without it.

R= right

L= left

DOG (1)= with a number between brackets it means that more than one sign is available for that term

D-O-G= the dash is used for fingerspelled words

X= used in the absence of relevant elements

Here an example of the chart structure:

LIS/IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom					
n-dom					

The first transcription of the sign is a linear transliteration of the sign with the data included in the charts. This is the layout that will be used:

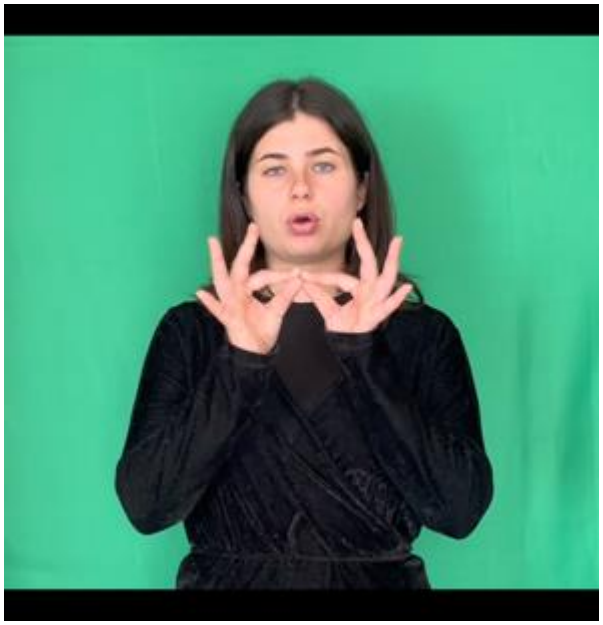
DOM: handshape-place of articulation-movement-orientation

N-DOM: handshape-place of articulation-movement-orientation

NNMs: X

Below an example:
DOM:
F FLAT CLOSED-NEUTRAL_SPACE-CONTACT-TIPS-INDEX-THUMB-L_ORIENTATION
N-DOM:
F FLAT CLOSED-NEUTRAL_SPACE-CONTACT_TIPS_INDEX_THUMB-R_ORIENTATION
NMMs: X

Agreement (1)



AGREEMENT

DOM:
F FLAT CLOSED-NEUTRAL-SPACE-CONTACT-TIPS-INDEX-THUMB-L-ORIENTATION
N-DOM:
F FLAT CLOSED-NEUTRAL-SPACE-CONTACT-TIPS-INDEX-THUMB-R-ORIENTATION
NMMs: X

LIS	HS	POA	MOV	OR	NMMs
dom	F-flat closed	neutral space	contact++ of the tips of index and thumb	facing L	X
n-dom	F-flat closed	neutral space	contact++ of the tips of index and thumb	facing R	X

Agreement (2)

DOM: F FLAT CLOSED-NEUTRAL_SPACE-SIDE_TO_SIDE-L_ORIENTATION

N-DOM: F FLAT CLOSED-NEUTRAL_SPACE-SIDE_TO_SIDE-R_ORIENTATION

NMMs: X

LIS	HS	POA	MOV	OR	NMMs
dom	F-flat-closed	neutral space	side to side	facing L	X
n-dom	F-flat-closed	neutral space	side to side	facing R	X

Adjective

ADJECTIVE

DOM: A-G^5-FLAT_CLOSED-NEUTRAL_SPACE-CONTACT-N_DOM-OUTWARD^DOWN_ORIENTATION
N-DOM: X^H-NEUTRAL_SPACE-X-PALM_FACING_SIGNER
NMMs: LEXICAL_MOUTHING-ADJECTIVE

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	A-G^5 flat closed	neutral space	contact with n-dom	palm facing outward^palm facing down	lexical mouthing of “ADJECTIVE ”
n-dom	X^H	neutral space	X	palm facing signer	

Adverb

ADVERB

DOM:A-V^5-FLAT_CLOSED-NEUTRAL_SPACE-CONTACT-N_DOM-OUTWARD^DOWN_ORIENTATION
N-DOM: X^5-CLOSED-NEUTRAL_SPACE-X-PALM_FACING_SIGNER
NMM: LEXICAL_MOUTHING-ADVERB

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	A-V^5 flat closed	neutral space	contact with n-dom	palm facing outward^palm facing down	lexical mouthing of “ADVERB”
n-dom	X^5-closed	neutral space	X	palm facing signer	

Active verb

ACTIVE^VERB (1)

DOM:
5_CLOSED^V_CURVED-NEUTRAL_SPACE^CHIN-
STRAIGHT_UPWARDS_MOVEMENT^STILL-PALMS_TOWARDS_SIGNER
N-DOM:5_CLOSED^V_CURVED-NEUTRAL_SPACE^CHIN-
STRAIGHT_UPWARDS_MOVEMENT^STILL-PALMS_TOWARDS_SIGNER
NMM: X

LIS	HS	POA	MOV	OR	NMMs
dom	5 closed^V-curved	neutral space^chin	straight upwards movement^still	palms towards signer	X
n-dom	5 closed^V-curved	neutral space^chin	straight upwards movement^still	palms towards signer	X

ACTIVE^VERB (2)

DOM:5_CLOSED^V_CURVED-NEUTRAL_SPACE^CHIN-CIRCULAR_MOVEMENT^STILL-PALMS_TOWARDS_SIGNER
N-DOM:5_CLOSED^V_CURVED-NEUTRAL_SPACE^CHIN-CIRCULAR_MOVEMENT^STILL-PALMS_TOWARDS_SIGNER
NMM: X

LIS	HS	POA	MOV	OR	NMMs
dom	5 closed^V-curved	neutral space^chin	circular movement^still	palms towards signer	X
n-dom	5 closed^V-curved	neutral space^chin	circular^movement^still	palms towards signer	X

Agent noun

AGENT^CL(L-curved)(1)

DOM:5_CLOSED^L_CURVED-NEUTRAL_SPACE-CIRCULAR_MOVEMENT^DOWNWARD_STRAIGHT_MOVEMENT-PALMS_TOWARDS_SIGNER^PALM_OUTWARDS
N-DOM: 5_CLOSED^X-NEUTRAL_SPACE-CIRCULAR^MOVEMENT^X-X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5 closed^L-curved	neutral space	circular movement^downward straight movement	palms towards signer^palm outwards	X
n-dom	5 closed^X	neutral space	circular^movement^X	X	X

AGENT^CL(5-flat-closed)(2)

DOM:5_CLOSED^5_FLAT_CLOSED^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^STILL^PALMS_TOWARDS_SIGNER^PALM_UPWARDS
N-DOM:
5_CLOSED^5_FLAT_CLOSED^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^X^PALM_TOWARDS_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5 closed^5-flat-closed	neutral space	circular movement^still	palms towards signer^palm upwards	X
n-dom	5 closed^5-flat-closed	neutral space	circular^movement^X	palm towards signer^X	X

Ancoring

ANCOR

DOM: G_CURVED-NEUTRAL_SPACE-STILL-PALMS_FACING_DOWNWARDS
N-DOM: G_CURVED-NEUTRAL_SPACE-STILL-PALMS_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-curved	neutral space	still	palms facing downwards	X
n-dom	G-curved	neutral space	still	palms facing downwards	X

Argument

TOPIC^CL(5-flat-closed)

DOM:2_CURVED_OPEN^5_FLAT_CLOSED-NEUTRAL_SPACEDOWNWARDS_WITH_CURVING_OF_FINGERS^STILL-FACING_L
N-DOM:
2_CURVED_OPEN-NEUTRAL_SPACE-DOWNWARDS_WITH_CURVING_OF_FINGERS^X-FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	2-curved-open^5-flat-closed	neutral space	downwards with the curving of he fingers^still	facing L	X
n-dom	2-curved-open	neutral space	downwards with the curving of he fingers^X	facing R	X

Assimilation

ASSIMILATION

DOM:5-PLACE_OF_ARTICULATION-OVERLAPPING_OF_TWO_HANDS-PALMS_FACING_DOWN

N-DOM:5-PLACE_OF_ARTICULATION-OVERLAPPING_OF_TWO_HANDS-PALMS_FACING_DOWN

NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5	neutral space	overlapping of the two hands	palms facing down	X
n-dom	5	neutral space	overlapping of the two hands	palms facing down	X

Borrow

BORROW^CL(5-flat-closed)(1)

DOM:
B_CURVED-NEUTRAL_SPACE-OVERLAPPING_OF_TWO_HANDS^STILL-PALMS_FACING_DOWN^PALM_FACING_UPWARDS
N-DOM:
B_OPEN-NEUTRAL_SPACE-OVERLAPPING_OF_TWO_HANDS^X-PALMS_FACING_DOWN
NMM: X

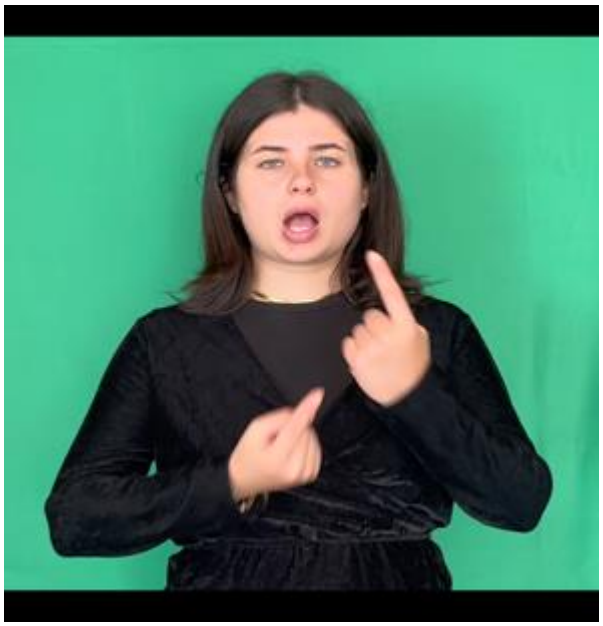
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-curved	neutral space	overlapping of the two hands^still	palms facing down^palm facing upwards	X
n-dom	B-open	neutral space	overlapping of the two hands^X	palms facing down^X	X

BORROW (2)

DOM: V_OPEN-NEUTRAL_SPACE-IPSILATERAL>CENTER-PALM_FACING_L
N-DOM: V_OPEN-NEUTRAL_SPACE-IPSILATERAL>CENTER-PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	V-open	neutral space	ipsilateral>center	palm facing L	X
n-dom	V-open	neutral space	ipsilateral>center	palm facing R	X

Case

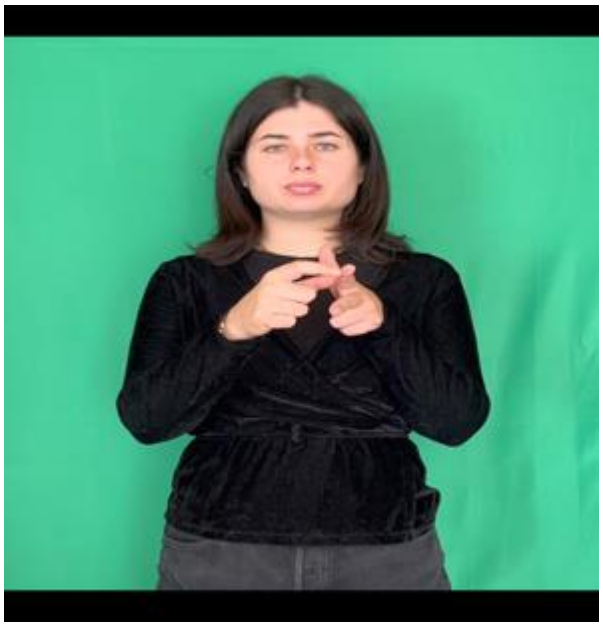


CASE

DOM: G_OPEN-NEUTRAL_SPACE-CIRCULAR_MOVEMENT-TOWARDS_THE_SIGNER
N-DOM: G_OPEN-NEUTRAL_SPACE-CIRCULAR_MOVEMENT-TOWARDS_THE_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-open	neutral space	circular movement	towards the signer	X
n-dom	G-open	neutral space	circular movement	towards the signer	X

Chereme

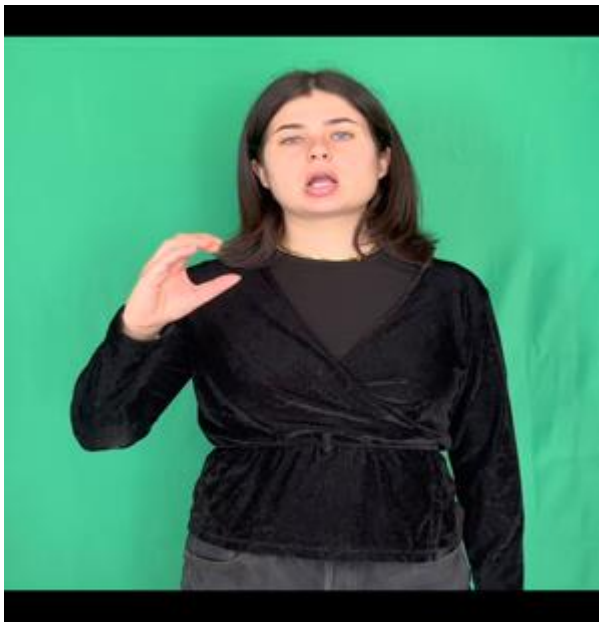


CHEREME

DOM: L_CURVED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^PALM_TOWARDS_L
N-DOM: 3_OPEN^NEUTRAL_SPACE^STILL^PALM_TOWARDS_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved	neutral space	contact with n-dom	palm towards L	
n-dom	3-open	neutral space	still	palm towards R	X

Classifier

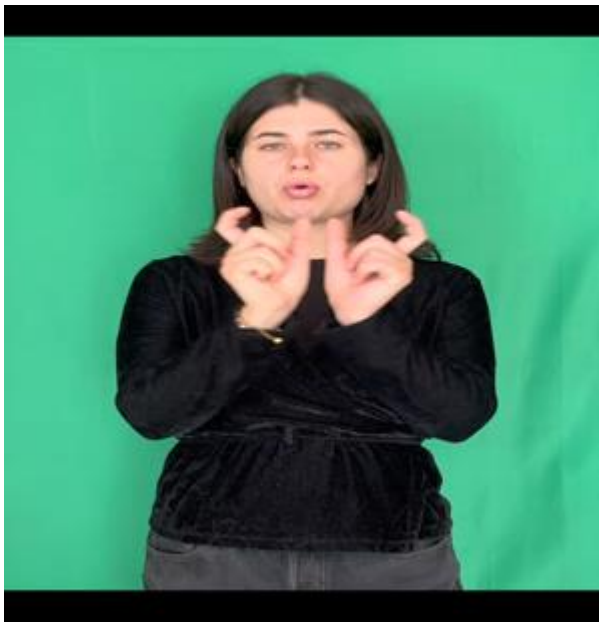


C-L

DOM: C-L^NEUTRAL_SPACE^C>L^PALMS_FACING_OUTWARDS
N-DOM: X
NMM: LEXICAL MOUTHING OF "CLASSIFIER"

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	C-L	neutral space	C>L	palms facing outwards	lexical mouthing of CLASSIFIER
n-dom	X	X	X	X	X

Compound



COMPOUND

DOM:L_CURVED_OPEN-NEUTRAL_SPACE-CONTACT++_OF_THE_THUMBS-PALMS_FACING_OUTWARDS
N-DOM:L_CURVED_OPEN-NEUTRAL_SPACE-CONTACT++_OF_THE_THUMBS-PALMS_FACING_OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X
n-dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X

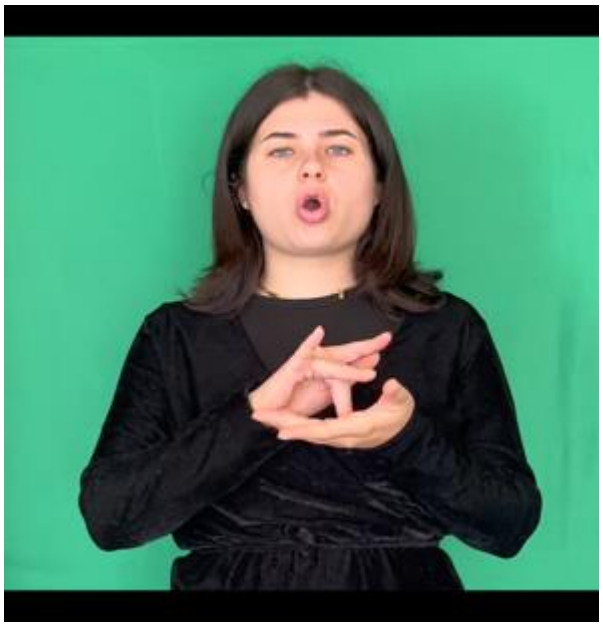
Coordination

CLAUSE^COORDINATION

DOM:F_FLAT_CLOSED^F-NEUTRAL_SPACE-FROM_CENTER_TO_R^SIDE_TO_SIDE-PALM_FACING_L
N-DOM: F_FLAT_CLOSED^F-NEUTRAL_SPACE-FROM_CENTER_TO_L^SIDE_TO_SIDE-PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	F-flat-closed^F	neutral space	from center to R^side to side	Palm facing L	X
n-dom	F-flat-closed?F	neutral space	from center to L^side to side	Palm facing R	X

Core



CORE

DOM:3/5-NEUTRAL_SPACE-STRAIGHT_DOWNWARD_MOVEMENT-PALM_FACING_DOWNWARDS
N-DOM: 5_OPEN-NEUTRAL_SPACE-STILL-PALM_FACING_UPWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	3/5	neutral space	straight downward movement	palm facing downwards	X
n-dom	5-open	neutral space	still	palm facing upwards	X

Declarative clause

DECLARATIVE^CLAUSE (1)

DOM:G_OPEN-CHIN>NEUTRAL_SPACE-STRAIGHT_OUTWARD_MOVEMENT-PALMS_TOWARDS_SIGNER
N-DOM:G_OPEN-CHIN>NEUTRAL_SPACE-STRAIGHT_OUTWARD_MOVEMENT-PALMS_TOWARDS_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-open	chin>neutral space	straight outward movement	palms towards signer	X
n-dom	G-open	chin>neutral space	straight outward movement	palms towards signer	X

DECLARATIVE^CLAUSE (2)

DOM:
F-NEUTRAL_SPACE-STRAIGHT_DOWNWARDS_MOVEMENT-PALM_FACING_THE_SIGNER
N-DOM:
F-NEUTRAL_SPACE-STRAIGHT_DOWNWARDS_MOVEMENT-PALM_FACING_THE_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	F	neutral space	straight downwards movement	palm facing the signer	X
n-dom	F	neutral space	straight downwards movement	palm facing the signer	X

Dependent clause

CLAUSE^DEPENDENT (1)

DOM:S^NEUTRAL_SPACE^DOM_GOES_UNDER_N_DOM_WITH_A_CIRCULAR_MOVEMENT^PALMS_FACING_THE_SIGNER
N-DOM:
S^NEUTRAL_SPACE^DOM_GOES_UNDER_N_DOM_WITH_A_CIRCULAR_MOVEMENT^PALMS_FACING_THE_SIGNER
NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	dom goes under n-dom with a circular movement	palms facing the signer	X
n-dom	S	neutral space	dom goes under n-dom with a circular movement	palms facing the signer	X

Only the second element of the compound has been analyzed, to see the analysis for CLAUSE, refer to DEPENDENT CLAUSE.

CLAUSE^DEPENDENT (2)

DOM:
S^NEUTRAL_SPACE^STRAIGHT_DOWNWARD_MOVEMENT^PALM_FACING_THE_SIGNER
N-DOM:
5_OPEN^NEUTRAL_SPACE^STRAIGHT_DOWNWARD_MOVEMENT^PALM_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-open	neutral space	straight downward movement	palm facing the signer	X
n-dom	5-open	neutral space	straight downward movement	palm facing downwards	X

Optionally the sign can be performed with the dominant hand in 5-flat-closed.

Dominant hand

HAND^DOMINANT (1)

DOM:5_OPEN^5_CLOSED-NEUTRAL_SPACE-OVERLAPPING_OF_HANDS>UPWARD_STRAIGHT_MOVEMENT-PALMS_FACING_DOWNWARDS^PALM_FACING_UP
N-DOM:5_OPEN^X-NEUTRAL_SPACE^X-OVERLAPPING_OF_HANDS^X-PALMS_FACING_DOWNWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open^5-closed	neutral space	overlapping of hands>upward straight movement	palms facing downwards^palm facing up	X
n-dom	5-open^X	neutral space^X	overlapping of hands^X	palms facing downward^X	X

DOMINANT^HAND (2)

DOM:5_CLOSED^5_OPEN-NEUTRAL_SPACE-
UPWARD_STRAIGHT_MOVEMENT^TREMBLING_HAND-
PALM_FACING_UP>PALM_FACING_OUTWARDS
N-DOM: X
NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed^5-open	neutral space	upward straight movement^trembling hand	palm facing up>palm facing outwards	X
n-dom	X	X	X	X	X

Handshape

HANDSHAPE (1)

DOM:S-NEUTRAL_SPACE-CIRCULAR_MOVEMENT_AROUND_N_DOM-FACING_THE_SIGNER
N-DOM: 5_CLOSED-NEUTRAL_SPACE-X-FACING_OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	circular movement around n-dom	facing the signer	X
n-dom	5-closed	neutral space	X	facing outwards	X

HANDSHAPE (2)

DOM:S-NEUTRAL_SPACE-CIRCULAR_MOVEMENT_AROUND_N_DOM-FACING_THE_SIGNER
N-DOM: 5_OPEN-NEUTRAL_SPACE-X-FACING_OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	circular movement around n-dom	facing the signer	X
n-dom	5-open	neutral space	X	facing outwards	X

HANDSHAPE (3)

DOM:B_FLAT_OPEN-NEUTRAL_SPACE-CIRCULAR_MOVEMENT_AROUND_N_DOM-FACING_THE_SIGNER
N-DOM: 5_OPEN-NEUTRAL_SPACE-X-FACING_TOWARDS_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-flat-open	neutral space	circular movement around n-dom	facing the signer	X
n-dom	5-open	neutral space	X	facing towards signer	X

Head noun

HEAD^NOUN (1)

DOM:

B_OPEN^N-HEAD^NEUTRAL_SPACE-TAPPING_OF_HEAD^TREMBLING_MOVEMENT-PALM_FACING_SIGNER

N-DOM:X

NNM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open^N	Head^neutral space	tapping of the head^trembling movement	palm facing signer	X
n-dom	X	X	X	X	X

CL(A): “head”^NOUN

DOM:5_CLOSED^N-NEUTRAL_SPACE^NEUTRAL_SPACE-CONTACT_WITH_N_DOM^TREMBLING-PALM_FACING_THE_SIGNER
N-DOM:G_OPEN^N-NEUTRAL_SPACE^NEUTRAL_SPACE-STILL-PALM_FACING_OUTWARDS^PALM_FACING_THE_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed^N	neutral space^neutral space	contact with n-dom^trembling	palm facing the signer	X
n-dom	G-open^N	neutral space^neutral space	still	palm facing outwards^palm facing the signer	X

Iconicity

ICONICITY (1)

DOM:V^EYE>PALM_OF_N_DOM^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^MOVING_TOWARDS_THE_SIGNER-PALM_FACING_THE_SIGNER
N-DOM:
5_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_OUTWARDS^PALM_FACING_TOWARDS_R
NMM: X

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	V	eye>palm of n-dom	from the eye to the palm of n-dom	towards the signer	X
n-dom	5-open	neutral space	still	towards R	X

ICONICITY (2)

DOM:5_OPEN>5_FLAT_CLOSED^NEUTRAL_SPACE^NEUTRAL_SPACE-OPENING_AND_CLOSING_ON_N_DOM^MOVING_TOWARDS_L

N-DOM:5_OPEN^NEUTRAL_SPACE^NEUTRAL_SPACE-STILL^MOVING_TOWARDS_R

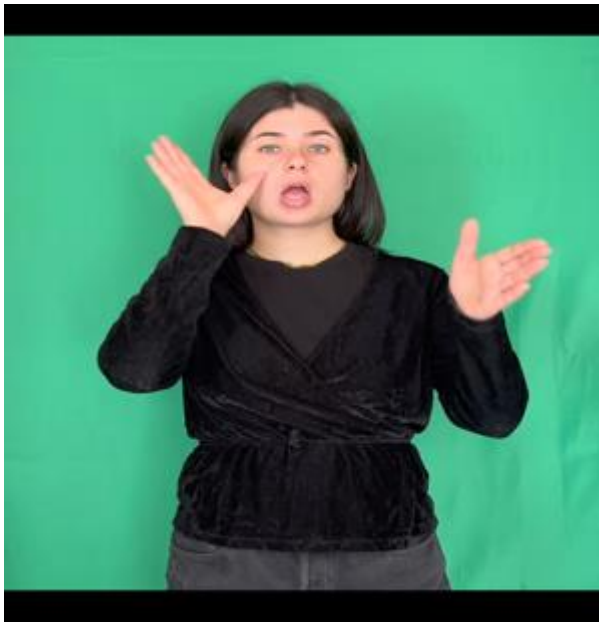
NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open>5-flat-closed	neutral space	opening and closing of dom on n-dom	towards L	X
n-dom	5-open	neutral space	still	towards R	X

ICONICITY (3)

DOM:5_OPEN>5_FLAT_CLOSED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^HORIZONTAL_STRAIGHT_MOVEMENT_TO_THE_R^MOVING_TOWARDS_L
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^MOVING_TOWARDS_R
NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open>5-flat-closed	neutral space	contact with n-dom and horizontal straight movement to the R	towards L	X
n-dom	5-open	neutral space	still	towards R	X



ICONICITY (4)

DOM:5_OPEN>5_FLAT_CLOSED^EYE>NEUTRAL_SPACE^CURVED_MOVEMENT_FROM_THE_EYE_TO_THE_N_DOM^CLOSING_OF_DOM_ON_N_DOM^MOVING_TOWARDS
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^MOVING_TOWARDS_R
NNM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open>5-flat-closed	eye>neutral space	curved movement from the eye to the n-dom^closing of dom on n-dom	towards L	X
n-dom	5-open	neutral space	still	towards R	X

Initialization

I^BEGIN

DOM:I^5_OPEN>5_FLAT_CLOSED^NEUTRAL_SPACE^TREMBLING_MOVEMENT^STRAIGHT_UPWARDS_MOVEMENT^PALM_FACING_OUTWARDS^PALMS_FACING_DOWNWARDS
N-
DOM:X^5_FLAT_CLOSED^NEUTRAL_SPACE^X^STRAIGHT_UPWARDS_MOVEMENT^X^PALMS_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	I^5-open>5-flat-closed	neutral space	trembling movement^straight upwards movement	palm facing outwards^palms facing downwards	X
n-dom	X^5-flat-closed	neutral space	X^straight upwards movement	X^palms facing downwards	X

Lexicon

LEXICON (1)

DOM:
L_CURVED^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALMS_TOWARDS_SIGNER^X
N-DOM:
L_CURVED^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALMS_TOWARDS_SIGNER^X
NMM: LABIALIZATION “LEXICON”

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved	neutral space	circular movement	palms towards signer	labialization of “Lexicon”
n-dom	L-curved	neutral space	circular movement	palms towards signer	X

This sign can also present with all the same parameters, with the exception of movement:

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved	neutral space	horizontal from center to R	palms towards signer	labialization of “Lexicon”

n-dom	L-curved	neutral space	horizontal from center to L	palms towards signer	X

LEXICON (2)

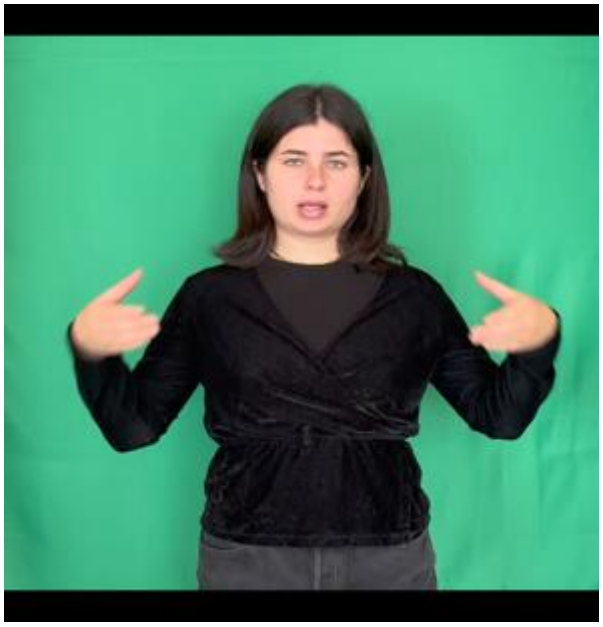
DOM:L_CURVED_OPEN^NEUTRAL_SPACE^VERTICAL_STRAIGHT_DOWNWARD_MOVEMENT^PALM_FACING_OUTWARDS
N-DOM: X
NMM: LABIALIZATION OF “LEXICON”

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved-open	neutral space	++ vertical straight downward	palm facing outwards	X
n-dom	X	X	X	X	X

LEXICON (3)

DOM:3_OPEN^NEUTRAL_SPACE^CONTACT++WITH_ARM_IN_DOWNWARD_VERTICAL_MOVEMENT^PALM_TOWARDS_SIGNER^X
N-DOM: 3_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_OUTWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	3-open	neutral space	contact++with arm in downward vertical movement	palm towards signer	X
n-dom	3-open	neutral space	still	palm facing outwards	X



LEXICON (4)

DOM:
B_CURVED^NEUTRAL_SPACE^CURVED_MOVEMENT_FROM_CENTER_TO_R^PALM_FACING_L^X
N-DOM:
B_CURVED^NEUTRAL_SPACE^CURVED_MOVEMENT_FROM_CENTER_TO_L^PALM_FACING_R^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-curved	neutral space	curved movement from center to to R	palm facing L	X
n-dom	B-curved	neutral space	curved movement from center to to L	palm facing R	X

Main clause

CLAUSE^FIRST (1)

DOM:F_FLAT_CLOSED^S^NEUTRAL_SPACE^ROTATIONAL_MOVEMENT_FROM_CENTER_TO_R^STRAIGHT_UPWARDS_MOVEMENT^PALM_FACING_L^PALM_FACING_SIGNER^X
N-
DOM:F_FLAT_CLOSED^S^NEUTRAL_SPACE^ROTATIONAL_MOVEMENT_FROM_CENTER_TO_L^X^PALM_FACING_R^X^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	F-flat-closed^S	neutral space	rotational movement from center to R^straight upwards movement	palm facing L^palm facing signer	X
n-dom	F-flat-closed^S	neutral space	rotational movement from center to L^X	palm facingr^X	X

The next signs all include the sign for CLAUSE, but only the second element of the compound will be analysed.

CLAUSE^MAIN (2)

DOM: S^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^PALM_FACING_SIGNER^X
N-DOM: B_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_DOWNWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	contact with n-dom	palm facing signer	X
n-dom	B-open	neutral space	still	palm facing downwards	X

CLAUSE^IMPORTANT (3)

DOM:5_CLOSED>L_OPEN^NEUTRAL_SPACE^CONTACT_WITH_N_DOM>UPWARDS_MOVEMENT^TOWARDS_SIGNER^X
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_UPWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed>L-open	neutral space	contact with n-dom>upwards movement	Towards signer	X
n-dom	5-open	neutral space	still	palm facing upwards	X

Marker

MARKER (1)

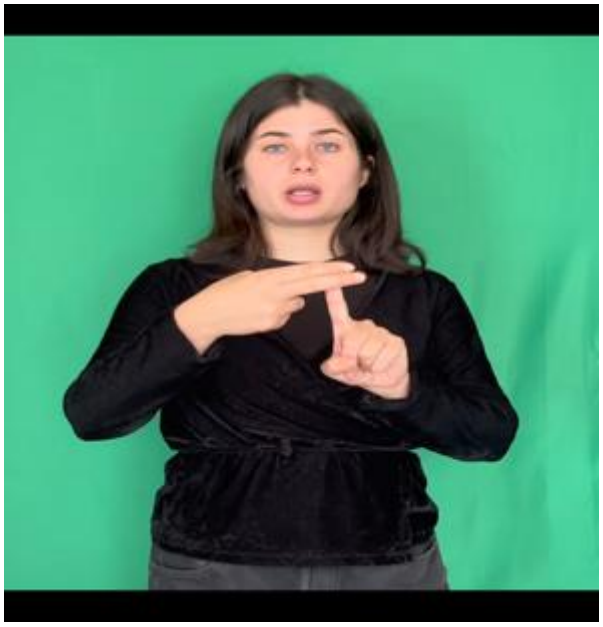
DOM: S^NEUTRAL_SPACE^CURVED_DOWNWARDS^PALM_TOWARDS_SIGNER^X
N-DOM: S^NEUTRAL_SPACE^CURVED_DOWNWARDS^PALM_TOWARDS_SIGNER^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	curved downwards	palm towards signer	X
n-dom	S	neutral space	curved downwards	palm towards signer	X

MARKER (2)

DOM:
G_CURVED^NEUTRAL_SPACE^HORIZONTAL_LINE_ON_N_DOM^PALM_FACING_DOWNWARDS^X
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^TOWARDS_R^X
NMM: X

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	G-curved	neutral space	horizontal line on n-dom	palm facing downwards	X
n-dom	5-open	neutral space	still	towards R	X



MARKER (3)

DOM: H^NEUTRAL_SPACE^++CONTACT_ON_N_DOM^TOWARDS_L^X
N-DOM: G_OPEN^NEUTRAL_SPACE^STILL^TOWARDS_R^X
NMM: X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	H	neutral space	++ contact on n-dom	towards L	X
n-dom	G-open	neutral space	still	towards R	X

MARKER (4)

DOM: H^NEUTRAL_SPACE^++CONTACT_ON_N_DOM^TOWARDS_L^X
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^TOWARDS_R^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	H	neutral space	++ contact on n-dom	towards L	X
n-dom	5-open	neutral space	still	towards R	X

Minimal pair

MINIMUM^PAIR

DOM:
B_OPEN^L_OPEN>L_FLAT_CLOSED^NEUTRAL_SPACE^DOWNWARDS_MOVEMENT^CLOSING_OF_INDEX_AND_THUMB^PALMS_FACING_DOWNWARDS^PALM_FACING_L^X
N-DOM:B_OPEN^NEUTRAL_SPACE^STILL^X^PALM_FACING_DOWNWARDS^X^X
NNM: X

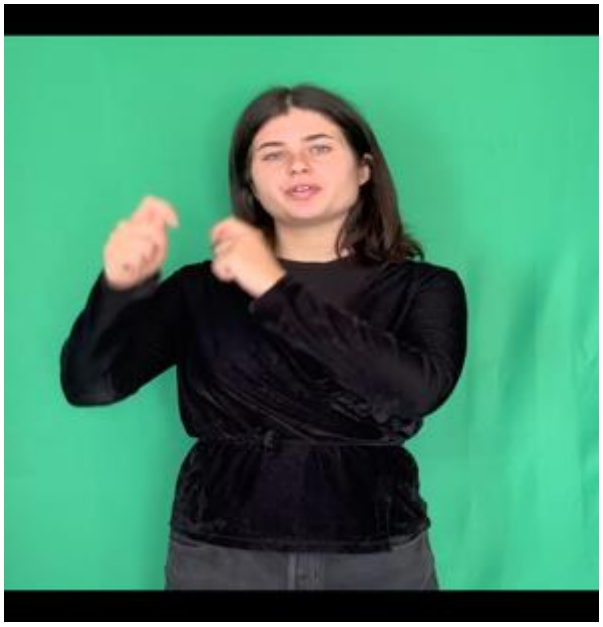
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open^L-open>L-flat-closed	neutral space	downwards movement^closing of index and thumb	palms facing downwards^palm facing L	X
n-dom	B-open	neutral space	still^X	palm facing downwards^X	X

Modifier

MODIFY (1)

DOM: S^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALM_FACING_OUTWARDS^X
N-DOM: S^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALM_FACING_OUTWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	circular movement	palm facing outwards	X
n-dom	S	neutral space	circular movement	palm facing outwards	X



MODIFY (2)

DOM: S^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALM_FACING_OUTWARDS^X
N-DOM: S^NEUTRAL_SPACE^CIRCULAR_MOVEMENT^PALM_FACING_OUTWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-curved	neutral space	downward movement	palm facing L	X
n-dom	G-curved	neutral space	downward movement	palm facing R	X

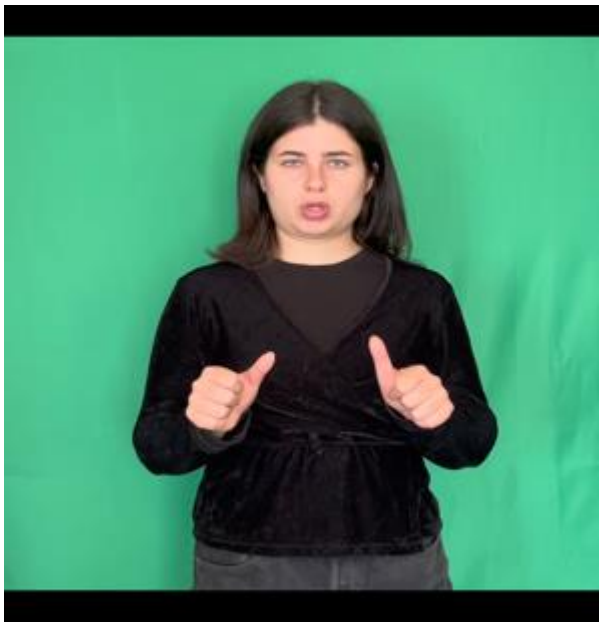
Morpheme

MORPHOLOGY^CL (L-flat-open)

DOM:S^L_FLAT_OPEN^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^STILL ^TOWARDS_L^PALM_FACING_OUTWARDS^X
N-DOM: S^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^TOWARDS_R^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S^L flat open	neutral space	curved downward movement^still	towards L^palm facing outwards	X
n-dom	S	neutral space	curved downward movement	towards R	X

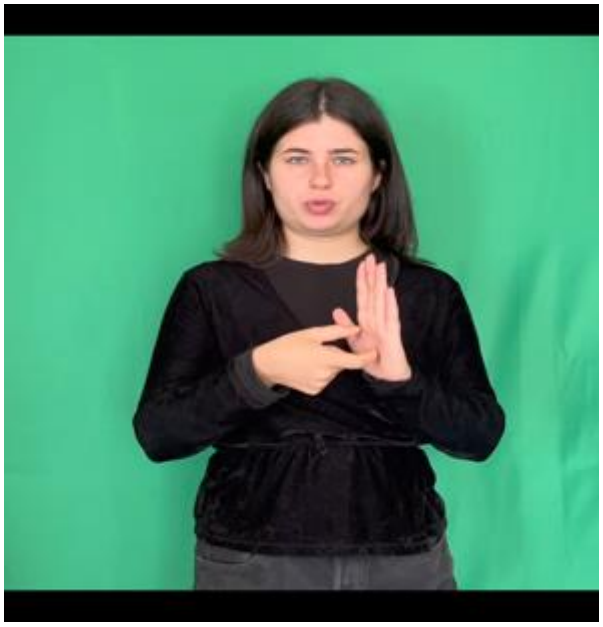
Morphology



MORPHOLOGY(1)

DOM: S^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^TOWARDS_L^X
N-DOM: S^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^TOWARDS_R^X
NMM: X

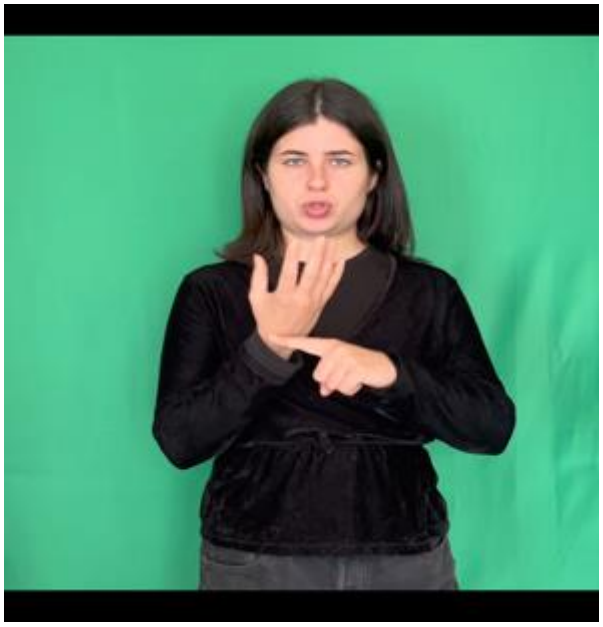
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	curved downward movement	towards L	X
n-dom	S	neutral space	curved downward movement	towards R	X



MORPHOLOGY(2)

DOM:L_FLAT_OPEN^NEUTRAL_SPACE^CHANGE_OF_ORIENTATION_OF_THE_HAND+CONTACT_WITH_N_DOM^PALM_FACING_DOWNWARDS^PALM_FACING_SIGNER^X
N-DOM:
5_OPEN^NEUTRAL_SPACE^CHANGE_OF_ORIENTATION_OF_THE_HAND^PALM_FACING_UPWARDS>PALM_FACING_OUTWARDS^X
NMM: X

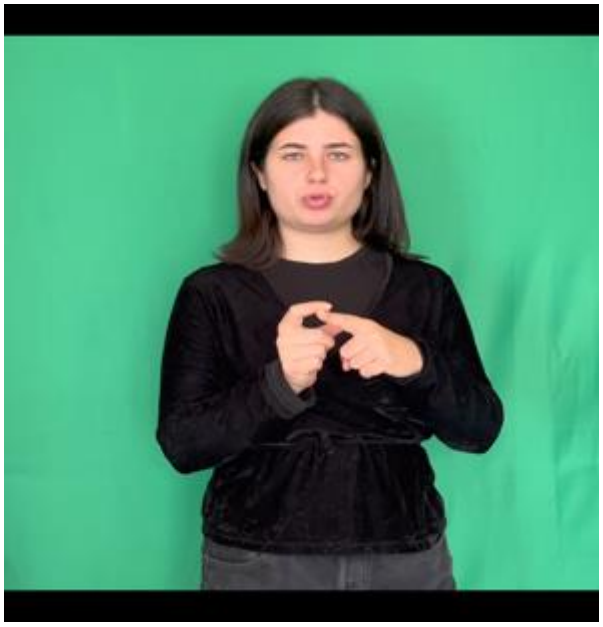
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-flat-open	neutral space	change of orientation of the hand+contact with n-dom	palm facing downwards^palm facing signer	X
n-dom	5-open	neutral space	change of orientation of the hand	palm facing upwards>palm facing outwards	X



MORPHOLOGY (3)

DOM:5_OPEN^NEUTRAL_SPACE^PALM_IN_CONTACT_WITH_N_DOM^FINGERS_MOVING^PALM_FACING_UPWARDS^X
N-DOM: G_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_DOWNWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open	neutral space	palm in contact with n-dom_fingers moving	palm facing upwards	X
n-dom	G-open	neutral space	still	palm facing downwards	X



MORPHOLOGY (4)

DOM: L_CURVED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^TOWARDS_L^X
N-DOM: G_OPEN^NEUTRAL_SPACE^STILL^TOWARDS_R^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved	neutral space	contact with n-dom	towards L	X
n-dom	G-open	neutral space	still	towards R	X

Morphosyntax

MORPHOLOGY^SYNTAX

DOM:
S^V_OPEN^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^STRAIGHT_DIAGONAL_MOVEMENT^TOWARDS_L^PALM_FACING_DOWNWARDS^X
N-DOM:
S^V_OPEN^NEUTRAL_SPACE^CURVED_DOWNWARD_MOVEMENT^STRAIGHT_DIAGONAL_MOVEMENT^TOWARDS_R^PALM_FACING_DOWNWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S^V-open	neutral space	curved downward movement^straight diagonal movement	towards L^palm facing downwards	X
n-dom	S^V-open	neutral space	curved downward movement^straight diagonal movement	towards R^palm facing downwards	X

MORPHOLOGY^SYNTAX

DOM:
L_CURVED^V_CURVED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^CONTACT_WITH_N_DOM^TOWARDS_L^PALM_FACING_OUTWARDS>SIGNER^X
N-DOM:
G_OPEN^V_CURVED^NEUTRAL_SPACE^STILL^CONTACT_WITH_DOM^TOWARDS_R^PALM_FACING_SIGNER>OUTWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved^V-curved	neutral space	contact with n-dom^contact with n-dom	towards L^palm facing outwards>signer	X
n-dom	G-open^V-curved	neutral space	still^contact with dom	towards R^palm facing signer>outwards	X

Movement

MOVEMENT

DOM:
A^NEUTRAL_SPACE^CIRCULAR_MOVEMENT_TOWARDS_SIGNER^PALMS_FACING_SIGNER^X
N-DOM:
A^NEUTRAL_SPACE^CIRCULAR_MOVEMENT_TOWARDS_SIGNER^PALMS_FACING_SIGNER^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	A	neutral space	circular movement towards signer	palms facing signer	X
n-dom	A	neutral space	circular movement towards signer	palms facing signer	X

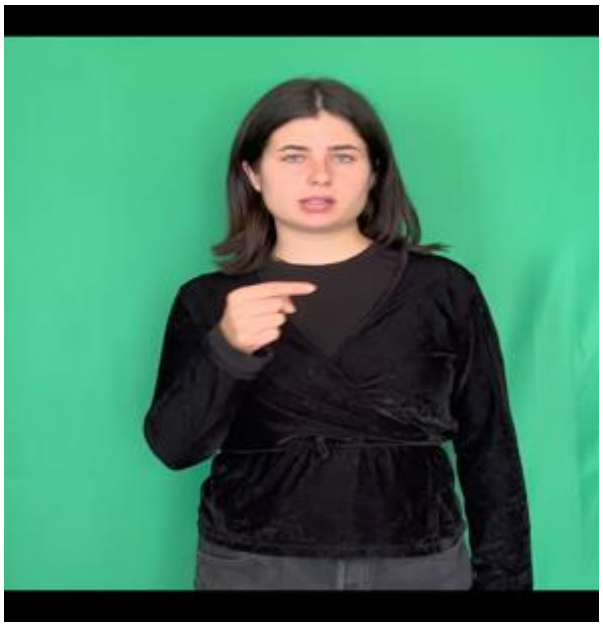
Optionally the sign can be performed with a slight rotation of the wrists.

MOVEMENT (2)

DOM:
5_FLAT_CLOSED^NEUTRAL_SPACE^FROM_SIDE_TO_SIDE^PALMS_FACING_DOWNWARDS^X
N-DOM:
5_FLAT_CLOSED^NEUTRAL_SPACE^FROM_SIDE_TO_SIDE^PALMS_FACING_DOWNWARDS^X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	from side to side	palms facing downwards	X
n-dom	5-flat-closed	neutral space	from side to side	palms facing downwards	X

Negation



NEGATION (1)

DOM:G^NEUTRAL_SPACE^CIRCULAR_MOVEMENT++^PALM_FACING_SIGNER^(CORRUGATED_EYEBROWS)
N-DOM: X
NMM: (CORRUGATED_EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G	neutral space	circular movement ++	palm facing signer	(corrugated eyebrows)
n-dom	X	X	X	X	X

NEGATION (2)

DOM:G^NEUTRAL_SPACE^STRAIGHT_MOVEMENT_TO_THE_SIDE^PALM_FACING_SIGNER
N-DOM: X
NMM: (CORRUGATED_EYEBROWS)

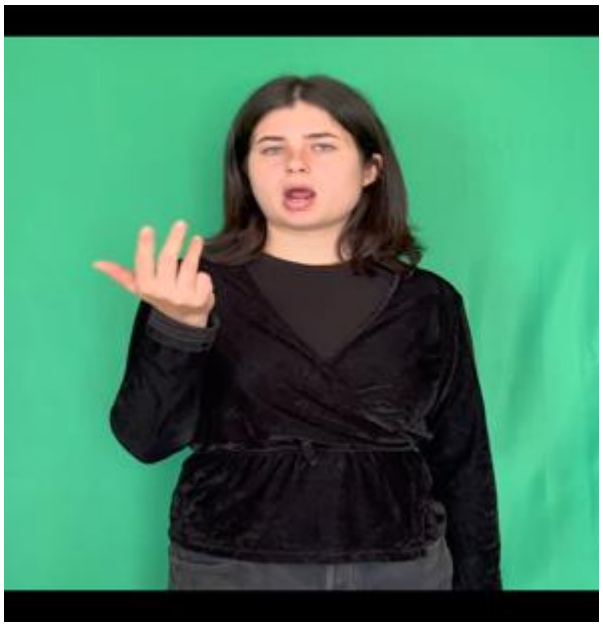
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G	neutral space	straight movement to the side	palm facing signer	(corrugated eyebrows)
n-dom	X	X	X	X	X

NEGATION (3)

DOM:A^NEUTRAL_SPACE^CIRCULAR_MOVEMENT_OUTWARDS^PALM_FACING_SIGNER>PALM_FACING_OUTWARDS
N-DOM: X
NMM: (CORRUGATED_EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	A	neutral space	circular movement outwards	palm facing signer>palm facing outwards	(corrugated eyebrows)
n-dom	X	X	X	X	X

Numeral



NUMERAL

DOM:5_CLOSED>5_OPEN^NEUTRAL_SPACE^OPENING_OF_THE_FINGERS_ONE_BY_ONE^PALM_FACING_UPWARDS
N-DOM: X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed>5-open	neutral space	opening of the finger one by one	palm facing upwards	X
n-dom	X	X	X	X	X

Object

O^CL(5-flat-closed)

DOM:O^5_FLAT_CLOSED^NEUTRAL_SPACE^STILL^PALM_FACING_OUTWARDS^PALM_FACING_UPWARDS
N-DOM: X
NMM: (LABIALIZATION "OBJECT")

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	O^5-flat-closed	neutral space	still	Palm facing outwards^palm facing upwards	labialization “OBJECT”
n-dom	X	X	X	X	X

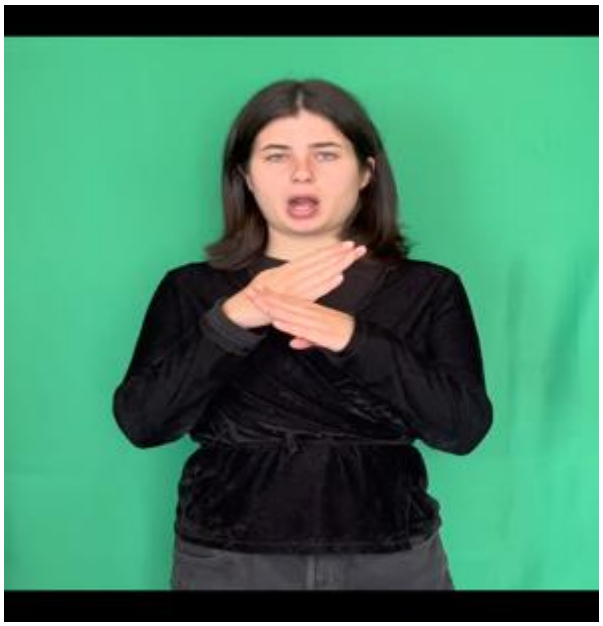
Orientation

ORIENTATION

DOM:
G^NEUTRAL_SPACE^TURNING_OF_THE_HAND^FACING_THE_SIGNER>FACING_OUTWARDS
N-DOM: 5_OPEN^NEUTRAL_SPACE^X^FACING_THE_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G	neutral space	turning of the hand	facing the signer>facing outwards	X
n-dom	5-open	neutral space	X	facing the signer	X

Parameter



PARAMETER

DOM:
B_OPEN^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^CHANGE_OF_ORIENTATION^PALM_FACING_THE_SIGNER>PALM_FACING_L
N-DOM:
B_OPEN^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^CHANGE_OF_ORIENTATION^PALM_FACING_THE_SIGNER>PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open	neutral space	contact with n-dom_change of orientation	palm facing the signer>palm facing L	X
n-dom	B-open	neutral space	contact with n-dom_change of orientation	palm facing the signer>palm facing R	X

Passive verb

PASSIVE^VERB (1)

DOM:B_OPEN^V_CURVED^NEUTRAL_SPACE^DOWNWARDS_IPSILATERAL_MOVEMENT^STILL^PALMS_FACING_DOWNWARDS^PALM_FACING_SIGNER
N-DOM:
B_OPEN^X^NEUTRAL_SPACE^DOWNWARDS_IPSILATERAL_MOVEMENT^X^PALMS_FACING_DOWNWARDS^X
NNM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open^V-curved	neutral space	downwards ipsilateral movement^still	palms facing downwards^palm facing signer	X
n-dom	B-open^X	neutral space	downwards ipsilateral movement^X	palms facing downwards^X	X

PASSIVE^VERB (2)

DOM:H_OPEN^V_CURVED^NEUTRAL_SPACE/HEAD^BENDING_OF_THE_FINGERS^STILL^PALMS_FACING_SIGNER^PALM_FACING_SIGNER
N-DOM:
H_OPEN^X^NEUTRAL_SPACE/HEAD^BENDING_OF_THE_FINGERS^X^PALMS_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	H-open^V-curved	neutral space/head	bending of the fingers^still	palms facing signer^palm facing signer	X
n-dom	H-open^X	neutral space/head	bending of the fingers^X	palms facing downwards^X	X

Phoneme

PHONOLOGY^CL(L-flat-open)

DOM:G^F_FLAT_OPEN^EAR>NEUTRAL_SPACE_IPSILATERAL^NEUTRAL_SPACE^SPIRAL_MOVEMENT^STILL^PALM_FACING_DOWN^PALM_FACING_SIGNER
N-DOM: X
NMM: X

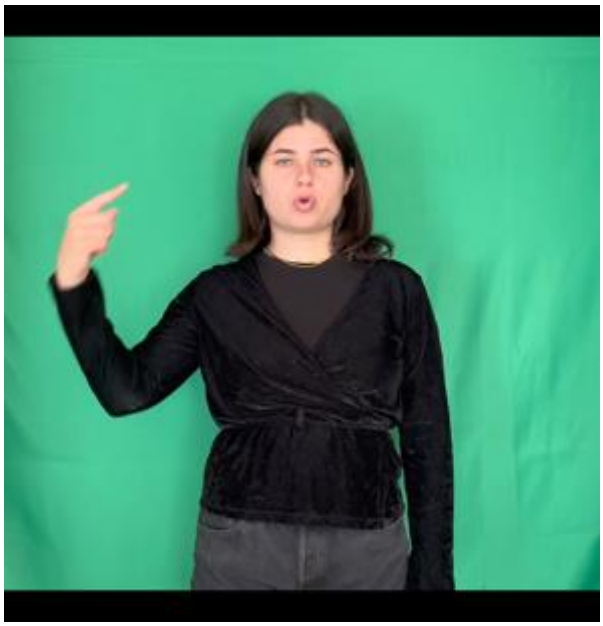
	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G^F-flat-open	ear>neutral space ipsilateral^neutral space	spiral movement^still	palm facing down^palm facing signer	X
n-dom	X	X	X	X	X

PHONOLOGY^CL(F-flat-open)(2)

DOM:G^F_FLAT_OPEN^EYE>NEUTRAL_SPACE^SPIRAL_MOVEMENT^STILL^PALM_FACING_DOWN^PALM_FACING_SIGNER
N-DOM: X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G^F-flat-open	eye>neutral space	spiral movement^still	palm facing down^palm facing signer	X
n-dom	X	X	X	X	X

Phonology



PHONOLOGY (1)

DOM:
G^EAR>NEUTRAL_SPACE_IPSILATERAL^SPIRAL_MOVEMENT^PALM_FACING_DOWN
N-DOM: X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G	ear>neutral space ipsilateral	spiral movement	palm facing down	X
n-dom	X	X	X	X	X

PHONOLOGY (2)

DOM: G^EYE>NEUTRAL_SPACE^SPIRAL_MOVEMENT^PALM_FACING_DOWN
N-DOM: X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G	eye>neutral space	spiral movement	palm facing down	X
n-dom	X	X	X	X	X

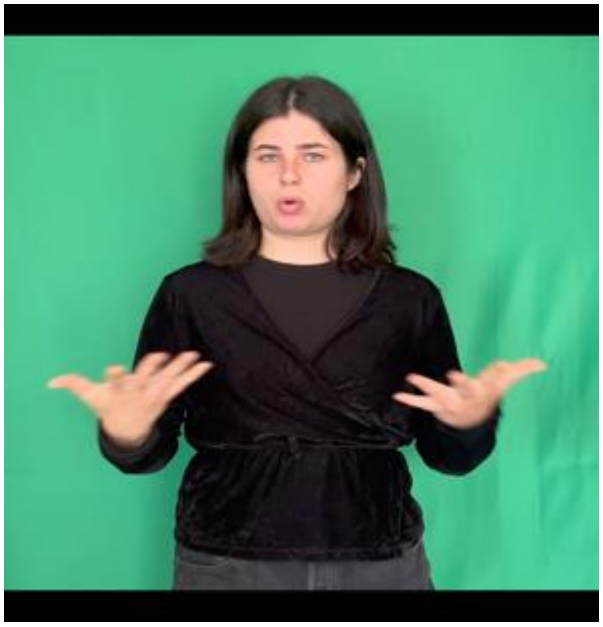
Plural

PLURAL (1)

DOM:5_FLAT_CLOSED^NEUTRAL_SPACE^++FROM_THE_CENTER_TO_THE_R^OPENING_AND_CLOSING_OF_THE_HAND^PALM_FACING_UPWARDS
N-DOM:
5_FLAT_CLOSED^NEUTRAL_SPACE^++FROM_THE_CENTER_TO_THE_L^OPENING_AND_CLOSING_OF_THE_HAND^PALM_FACING_UPWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	++from the center to the R_opening and closing of the hand	palm facing upwards	X
n-dom	5-flat-closed	neutral space	++from the center to the L_opening and closing of the hand	palm facing upwards	X

Optionally the non-dominant hand stays still and only the dominant hand performs the movement.



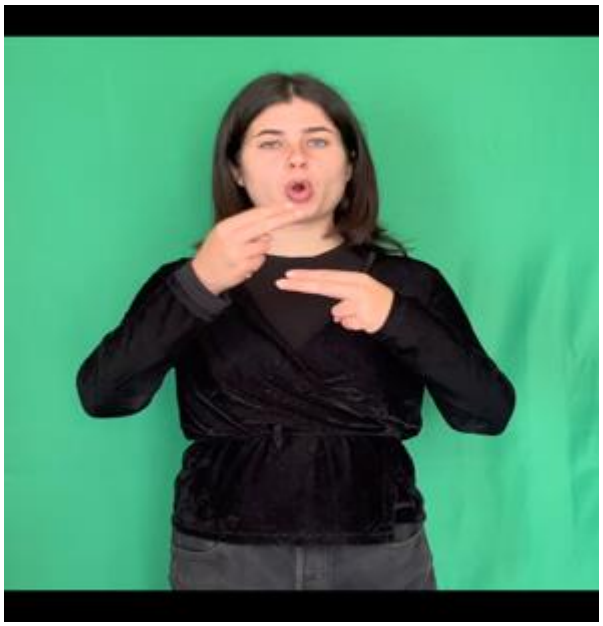
PLURAL (2)

DOM:5_CLOSED>5_OPEN^NEUTRAL_SPACE^FROM_THE_CENTER_TO_THE_R^OPENING_OF_THE_FINGERS^PALMS_FACING_THE_SIGNER
N-DOM:
5_CLOSED>5_OPEN^NEUTRAL_SPACE^FROM_THE_CENTER_TO_THE_L^OPENING_OF_THE_FINGERS^PALMS_FACING_THE_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed>5 open	neutral space	from the center to the R_opening of the fingers	palms facing the signer	X
n-dom	5-closed>5 open	neutral space	from the center to the L_opening of the fingers	palms facing the signer	X

Optionally it can also be performed with just one hand.

Pronoun

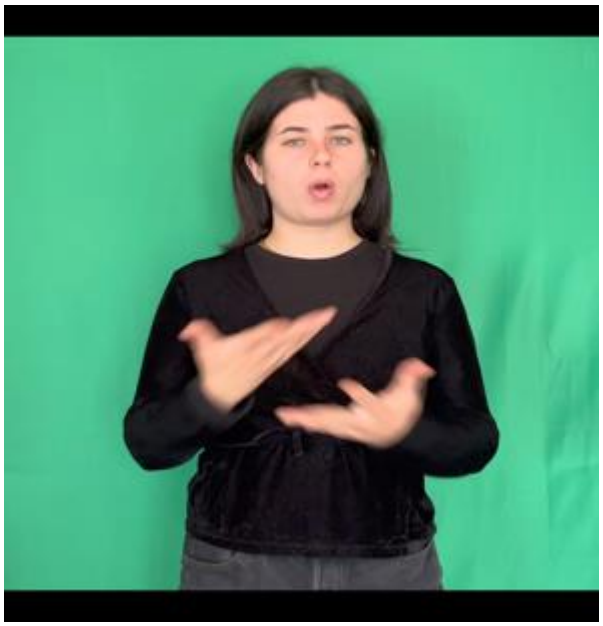


PRONOUN

DOM:
H_OPEN^NEUTRAL_SPACE^ROUND_MOVEMENT_AROUND_N_DOM^PALM_FACING_SIGNER
N-DOM: H_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_SIGNER
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	H-open	neutral space	round movement around n-dom	palm facing signer	X
n-dom	H-open	neutral space	still	palm facing signer	X

Quantifier



QUANTIFIER

DOM:5_CLOSED>5_OPEN^NEUTRAL_SPACE^OPENING_OF_THE_FINGERS^PALM_FACING_UPWARDS
N-DOM: X
NMM: labialization of “QUANTIFIER”

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed>5-open	neutral space	opening of the finger	palm facing upwards	X
n-dom	X	X	X	X	X

This sign is very similar to NUMERAL, but the latter employs the action of counting one by one, whereas for QUANTIFIER the opening of the fingers is quicker. For it not to be mistaken for PLURAL - which is also very similar - it is supported by labialization.

Relative clause

CLAUSE^RELATIVE

DOM:F^F_FLAT_CLOSED^NEUTRAL_SPACE^STRAIGHT_MOVEMENT_FROM_THE_SIGNER_TO_OUTWARDS^ROTATED_MOVEMENT_FROM_THE_CENTER_TO_THE_R^PALM_FACING_THE_SIGNER^PALM_FACING_L
N-DOM:
F^F_FLAT_CLOSED^NEUTRAL_SPACE^STRAIGHT_MOVEMENT_FROM_THE_SIGNER_TO_OUTWARDS^ROTATED_MOVEMENT_FROM_THE_CENTER_TO_THE_R^PALM_FACING_OUTWARDS^PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	F^F-flat-closed	neutral space	straight movement from the signer to outwards^rotated movement from the center to the R	palm facing the signer^palm facing L	X
n-dom	F^F-flat-closed	neutral space	straight movement from the signer to outwards^rota	palm facing outwards^palm facing R	X

			ted movement from the center to the R		

Saliency

SALIENCY (1)

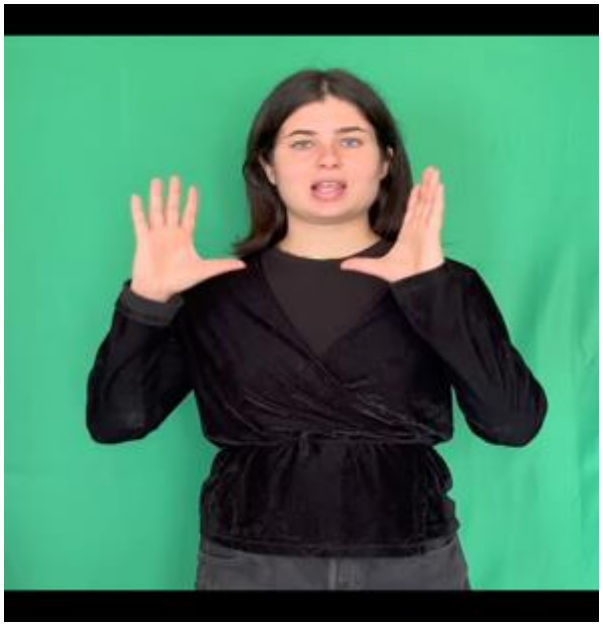
DOM:G_OPEN>G_CURVED^NEUTRAL_SPACE^BENDING_OF_THE_FINGER_UPWARDS_MOVEMENT^PALM_FACING_UPWARDS
N-DOM: X
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-open>G-curved	neutral space	bending of the finger_upwards movement	palm facing upwards	X
n-dom	X	X	X	X	X

SALIENCY (2)

DOM:5_OPEN>5_CURVED^NEUTRAL_SPACE^UPWARD_MOVEMENT_TOWARDS_SIGNER^PALMS_FACING_UPWARDS
N-DOM:
5_OPEN>5_CURVED^NEUTRAL_SPACE^UPWARD_MOVEMENT_TOWARDS_SIGNER^PALMS_FACING_UPWARDS
NMM: (RAISED_EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open>5-curved	neutral space	upward movement towards signer	palms facing upwards	(raised eyebrows)
n-dom	5-open>5-curved	neutral space	upward movement towards signer	palms facing upwards	(raised eyebrows)

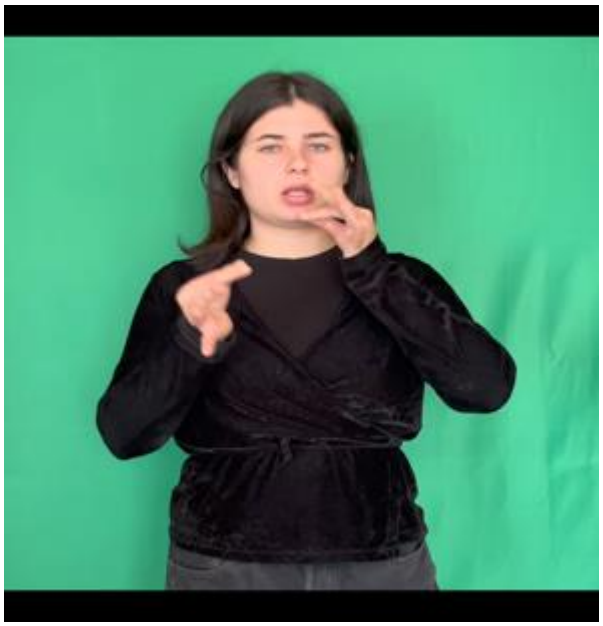


SALIENCY (3)

DOM:5_FLAT_CLOSED>5_OPEN^NEUTRAL_SPACE^OPENING_OF_THE_FINGERS^PALMS_FACING_OUTWARDS
N-DOM:
5_FLAT_CLOSED>5_OPEN^NEUTRAL_SPACE^OPENING_OF_THE_FINGERS^PALMS_FACING_OUTWARDS
NMM: (RAISED_EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed>5-open	neutral space	opening of the fingers	palms facing outwards	(raised eyebrows)
n-dom	5-flat-closed>5-open	neutral space	opening of the fingers	palms facing outwards	(raised eyebrows)

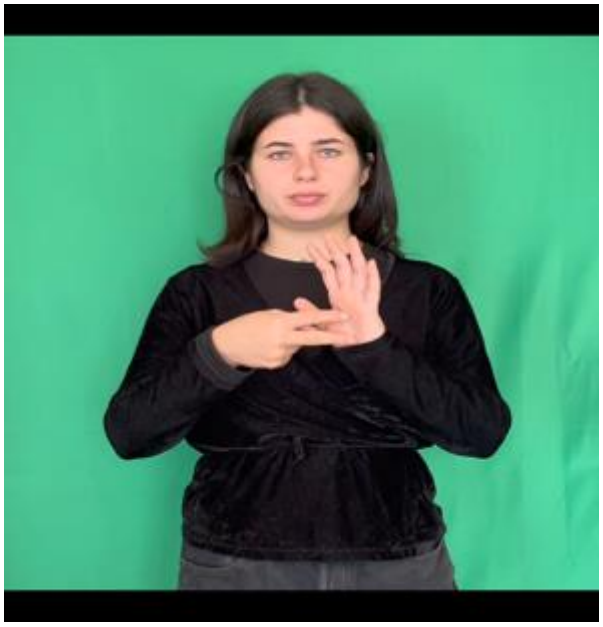
Semantic



SEMANTIC (1)

DOM:
F_FLAT_CLOSED^CHIN^CIRCULAR_MOVEMENT_TOWARDS_THE_SIGNER^PALM_FACING_L
N-DOM:
F_FLAT_CLOSED^CHIN^CIRCULAR_MOVEMENT_TOWARDS_THE_SIGNER^PALM_FACING_R
NMM: LABIALIZATION OF “SEMANTIC”

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	F-flat-closed	chin	circular movement towards the signer	palm facing L	labialization of “Semantic”
n-dom	F-flat-closed	chin	circular movement towards the signer	palm facing R	X



SEMANTIC (2)

DOM:V_OPEN^NEUTRAL_SPACE^CHANGE_OF_ORIENTATION_OF_THE_HAND+CONTACT_WITH_N_DOM^PALM_FACING_DOWNWARDS^PALM_FACING_SIGNER
N-DOM:
5_OPEN^NEUTRAL_SPACE^CHANGE_OF_ORIENTATION_OF_THE_HAND^PALM_FACING_UPWARDS>PALM_FACING_OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	V-open	neutral space	change of orientation of the hand+contact with n-dom	palm facing downwards^palm facing signer	X
n-dom	5-open	neutral space	change of orientation of the hand	palm facing upwards>palm facing outwards	X

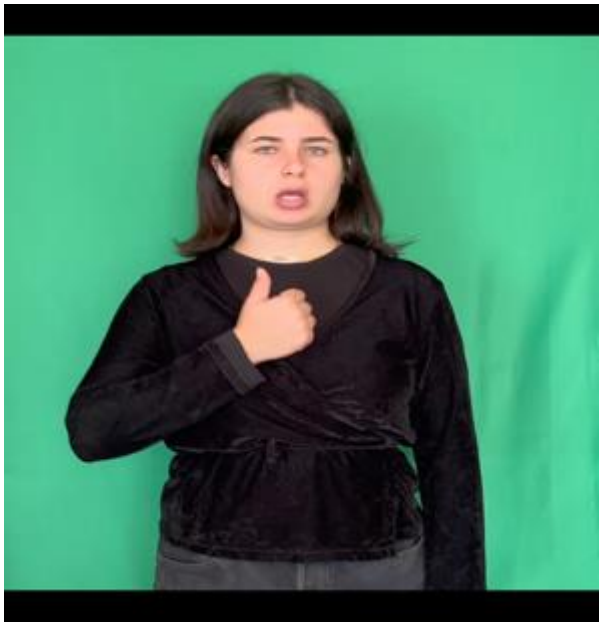
Singular

SINGULAR (1)

DOM:G_OPEN^NEUTRAL_SPACE^TREMBLING_MOVEMENT^PALM_TOWARDS_THE_SIGNER
N-DOM: X
NMM: LABIALIZATION OF “SINGULAR”

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	G open	neutral space	trembling movement	pam towards the signer	lexical mouthing of “singular”
n-dom	X	X	X	X	X

This sign can be performed both with G-open and S handshape.



SINGULAR (2)

DOM:S^CHEST^TAPPING_MOVEMENT^PALM_TOWARDS_THE_SIGNER
N-DOM: X
NMM: LABIALIZATION OF "SINGULAR"

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S	chest	tapping movement	pam towards the signer	labialization of “singular”
n-dom	X	X	X	X	X

Syntax

SYNTAX (1)

DOM:
V_OPEN^NEUTRAL_SPACE^STRAIGHT_DIAGONAL_MOVEMENT^PALM_FACING_DOWNWARDS
N-DOM:
V_OPEN^NEUTRAL_SPACE^STRAIGHT_DIAGONAL_MOVEMENT^PALM_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	V-open	neutral space	straight diagonal movement	palm facing downwards	X
n-dom	V-open	neutral space	straight diagonal movement	palm facing downwards	X

SYNTAX (2)

DOM:G_OPEN>G_CURVED^NEUTRAL_SPACE^HORIZONTAL_LINE_FROM_CENTER_TO_R^PALM_FACING_L
N-DOM:
G_OPEN>G_CURVED^NEUTRAL_SPACE^HORIZONTAL_LINE_FROM_CENTER_TO_L^PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-open>G-curved	neutral space	horizontal line from center to R	palm facing L	X
n-dom	G-open>G-curved	neutral space	horizontal line from center to L	palm facing R	X

SYNTAX (3)

DOM:
V_CURVED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM^PALM_FACING_OUTWARDS>SIGNER
N-DOM:
V_CURVED^NEUTRAL_SPACE^CONTACT_WITH_DOM^PALM_FACING_SIGNER>OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	V-curved	neutral space	contact with n-dom	palm facing outwards>signer	X
n-dom	V-curved	neutral space	contact with dom	palm facing signer>outwards	X

Subject

S^CL(5-flat-closed)

DOM:S^5_FLAT_CLOSED^NEUTRAL_SPACE^STILL^PALM_FACING_OUTWARDS^PALM_FACING_UPWARDS
N-DOM: X
NMM: LABIALIZATION OF "SUBJECT"

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	S^5-flat-closed	neutral space	still	palm facing outwards^palm facing upwards	labialization of “subject”
n-dom	X	X	X	X	X

Temporal clause

CLAUSE^TIME (1)

DOM:L_OPEN^NEUTRAL_SPACE^CONTACT_WITH_N_DOM_DOWNWARDS_MOVEMENT^PALM_FACING_SIGNER>DOWNWARDS
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_R
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-open	neutral space	contact with n-dom_downwards movement	palm facing signer>downwards	X
n-dom	5-open	neutral space	still	palm facing R	X

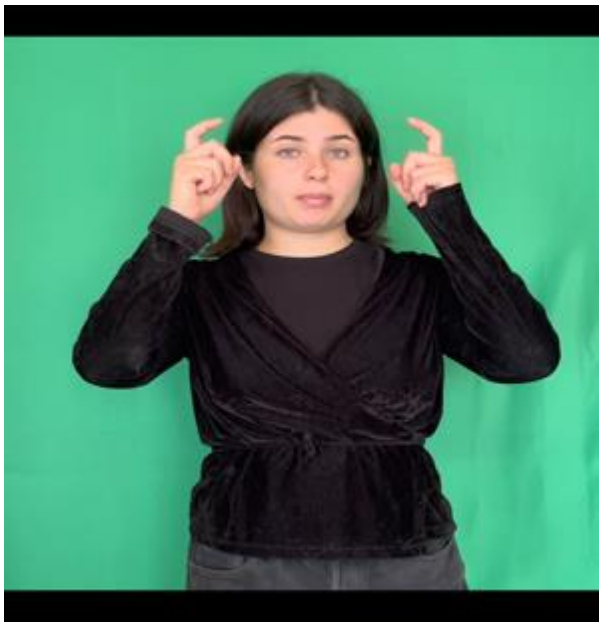
Only the second sign of the compound will be analyzed, to see the analysis for CLAUSE see DEPENDANT CLAUSE.

CLAUSE^TIME (2)

DOM:L_OPEN>L_CLOSED^NEUTRAL_SPACE^CONTACT_WITH_N_DOM>CLOSING_OF_FINGERS^PALM_FACING_DOWNWARDS
N-DOM: 5_OPEN^NEUTRAL_SPACE^STILL^PALM_FACING_DOWNWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-open>L-closed	neutral space	contact with n-dom>closing of fingers	palm facing downwards	X
n-dom	5-open	neutral space	still	palm facing downwards	X

Topic



TOPIC

DOM:G_CURVED^EYES^SHORT_STRAIGHT_UPWARD_MOVEMENT^PALM_FACING_L
N-DOM:
G_CURVED^EYES^SHORT_STRAIGHT_UPWARD_MOVEMENT^PALM_FACING_L
NMM: (RAISED_EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	G-curved	eyes	short straight upward movement	palm facing L	raised eyebrows
n-dom	G-curved	eyes	short straight upward movement	palm facing R	raised eyebrows

Wh- question

W-H^QUESTION

DOM:W^H_G_CURVED^NEUTRAL_SPACE^W>H^CURVED_MOVEMENT_DOWNWARDS
^PALM_FACING_OUTWARDS
N-DOM: X
NMM: (CORRUGATED EYEBROWS)

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	W-H^G-curved	neutral space	W>H^curved movement downwards	palm facing outwards	(corrugated eyebrows)
n-dom	X	X	X	X	X

Word order

WORD^ORDER

DOM:
L_CURVED_OPEN^NEUTRAL_SPACE^SIDE_TO_SIDE_MOVEMENT^PALM_FACING_OUTWARDS
N-DOM:
L_CURVED_OPEN^NEUTRAL_SPACE^SIDE_TO_SIDE_MOVEMENT^PALM_FACING_OUTWARDS
NMM: X

	HS	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved-open	neutral space	side to side movement	palm facing outwards	X
n-dom	L-curved-open	neutral space	side to side movement	palm facing outwards	X

APPENDIX 3

This appendix might include signs that are not present in Appendix 2, as this is the result of the focus group with new signs possibilities emerged.

ADJECTIVE

LIS	HS	POA	MOV	OR	NMMs
dom	A-G^5 flat closed	neutral space	contact with n-dom	palm facing outward^palm facing down	labialization of “ADJECTIVE”
n-dom	X^H	neutral space	X	palm facing signer	

IS	HS	POA	MOV	OR	NMMs
dom	A-G	neutral space	X	palm facing outward	labialization of “ADJECTIVE”
n-dom	X	neutral space	X	palm facing outward	

Both LIS and IS employ the strategy of initialization, likely to facilitate the distinction between "ADJECTIVE" and "ADVERB." However, LIS also utilizes the strategy of compounding by incorporating the sign "ADD." Additionally, in LIS, the sign for "ADJECTIVE" can also be observed without the initial initialization.

AGREEMENT (1)

LIS	HS	POA	MOV	OR	NMMs
dom	F-flat closed	neutral space	contact++ of the tips of index and thumb	facing L	X

n-dom	F-flat closed	neutral space	contact++ of the tips of index and thumb	facing R	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	F	neutral space	contact++ of the tips of index and thumb	facing L	X
n-dom	F	neutral space	contact++ of the tips of index and thumb	facing R	X

AGREEMENT (2)

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	F-flat-closed	neutral space	side to side	facing L	X
n-dom	F-flat-closed	neutral space	side to side	facing R	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	F-flat-closed	neutral space	side to side	facing L	X
n-dom	F-flat-closed	neutral space	side to side	facing R	X

It is noteworthy that both LIS and IS utilize similar linguistic strategies for both versions. They both employ the same handshape, involving either contact or the intertwining of two fingers, to convey the concept of a connection or relationship between elements. Regarding "AGREEMENT (1)," both LIS and IS use the citational form of the sign "AGREE." This demonstrates a frequent linguistic strategy in interpreting specialized terminology, which involves borrowing a non-specific term from everyday language and adapting it for use in a specific, specialized context.

AGENT NOUN

LIS	HS	POA	MOV	OR	NMMs
dom	5 closed^5 flat closed	neutral space	circular movement forwards^still position	palms facing the signer^palm facing up	X
n-dom	5 closed	neutral space	circular movement forwards	palms facing the signer	X

IS	HS	POA	MOV	OR	NMMs
dom	L-curved-open^N	neutral space	downwards^trembling	palm facing outwards^palm facing down	labialization of “NOUN”
n-dom	X	X	X	X	X

In this case, LIS and IS apply different linguistic strategies. For what concerns LIS, one of the strategies employed is **compounding**, with the use of the classifier with handshape 5-flat-closed, which refers both to human and non-human referents. For IS, another common strategy is used, which is **initialization** for “NOUN”.

ARGUMENT

LIS	HS	POA	MOV	OR	NMMs
dom	2-curved-open^5-flat-closed	neutral space	downwards with the curving of he fingers^still	facing L	X
n-dom	2-curved-open	neutral space	downwards with the curving of he fingers^X	facing R	X

LIS/IS	HS	POA	MOV	OR	NMMs
dom	A-R-G	neutral space	X	palm facing outwards	labialization of ARGUMENT
n-dom	X	X	X	X	X

In the absence of a specific term, IS opts for partial fingerspelling, accompanied by the full mouthing of "ARGUMENT." Conversely, LIS employs the citational form of TOPIC/ARGUMENT borrowing a non-specific term and adapting it with a specialized meaning. This is further enhanced by the addition of a classifier that refers to both human and non-human entities, utilizing the strategy of compounding.

ASSIMILATION

LIS	HS	POA	MOV	OR	NMMs
dom	5-open>5-flat-closed	neutral space	closing of the fingers	palm facing outwards	X
n-dom	L-curved-open	neutral space	X	palm facing outwards	X

IS	HS	POA	MOV	OR	NMMs
dom	5	place of articulation	overlapping of the two hands	palms facing down	X
n-dom	5	place of articulation	overlapping of the two hands	palms facing down	X

In this case both LIS and IS employ the metaphorical sense of the term in question.

ACTIVE VERB

LIS	HS	POA	MOV	OR	NMMs

dom	5 closed^2 curved open	neutral space^chin	circular movement forwards^still position	palms facing the signer^palm facing the signer	X
n-dom	5 closed^X	neutral space^X	circular movement forwards^X	palms facing the signer^X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed^5-open	neutral space	upward movement^trembling movement	palms facing the signer^palm facing outwards	X
n-dom	5-closed	neutral space	upward movement	palms facing the signer	X

Both LIS and IS utilize **compounding**, incorporating the citational form of the sign for ACTIVE followed by the sign for VERB in post-position.

CLASSIFIER

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	C-L	neutral space	C>L	palms facing outwards	labialization of CLASSIFIER
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	C-L	neutral space	C>L	palms facing outwards	labialization of CLASSIFIER
n-dom	X	X	X	X	X

In this case both LIS and IS choose to use **initialization**.

COMPOUND

LIS/IS	HS	POA	MOV	OR	NMMs
dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X
n-dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X

IS	HS	POA	MOV	OR	NMMs
dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X
n-dom	L-curved-open	neutral space	contact++ of the thumbs	palms facing outwards	X

The sign for COMPOUND is identical in both LIS and IS. Both signs represent the **metaphorical** concept of combining two terms by visually depicting the convergence of two elements. This effectively leverages the **iconic** nature of sign languages.

DEPENDANT CLAUSE

LIS	HS	POA	MOV	OR	NMMs
dom	G-open	neutral space	straight downward movement	palm facing the signer	X
n-dom	5-open	neutral space	straight downward movement	palm facing down	X

IS	HS	POA	MOV	OR	NMMs
dom	S	neutral space	dom goes under n-dom with a circular	palms facing the signer	X

			movement		
n-dom	S	neutral space	dom goes under n-dom with a circular movement	palms facing the signer	X

In LIS, the dominant hand can adopt either the S or G handshape. Despite these variations, the signs effectively convey the concept of dependency, reflecting the metaphorical sense of the term. In LIS, this is achieved through the positioning of the hands and a downward movement. In IS, the same concept is expressed by positioning the hands one beneath the other.

DOMINANT HAND

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open^5-closed	neutral space	overlapping of hands>upward straight movement	palms facing downwards^palm facing up	X
n-dom	5-open^X	neutral space^X	overlapping of hands^X	palms facing downward^X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed^5-open	neutral space	upward straight movement^trembling hand	palm facing up>palm facing outwards	X
n-dom	X	X	X	X	X

Both LIS and IS utilize **compounding**, incorporating the same sign for "DOMINANCE" along with their respective signs for "HAND."

HANDSHAPE

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	circular	facing the	X

			movement around n-dom	signer	
n-dom	5-closed	neutral space	X	facing outwards	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	circular movement around n-dom	facing the signer	X
n-dom	5-open	neutral space	X	facing outwards	X

Even though the handshape for the non-dominant hand varies, the sign remains very similar, with the dominant hand accentuating the shape of the non-dominant hand.

HEAD NOUN

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open^H-open	Head^neutral space	tapping of the head^horizontal movement from L to R	palm facing signer	X
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	B-open^N	Head^neutral space	tapping of the head^trembling movement	palm facing signer	X
n-dom	X	X	X	X	X

In both LIS and IS, the concept of a "head noun" is conveyed by the signer directly referencing the head, effectively underscoring the semantic content associated with the term. This gesture not only visually represents the idea of a head but also helps to reinforce the notion of a principal element

within a phrase or clause. After establishing this reference, both LIS and IS proceed to perform their respective signs for "noun," thereby completing the expression. This sequential strategy of indicating the head followed by the noun sign ensures clarity and emphasizes the hierarchical structure within the linguistic context.

ICONICITY

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	V	eye>palm of n-dom	from the eye to the palm of n-dom	towards the signer	X
n-dom	5-open	neutral space	still	towards R	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-open>5-flat-closed	neutral space	opening and closing of dom on n-dom	towards L	X
n-dom	5-open	neutral space	still	towards R	X

Both LIS and IS employ the same handshape for the non-dominant hand, which is typically associated with the semantic concept of "picture" or "image." This alignment is particularly effective in conveying the semantic content of iconicity. In LIS, the sign for the verb "SEE" is incorporated into the sign, thereby emphasizing the underlying concept. Similarly, in IS, there is an option to initiate the sign with the dominant hand near the eye, followed by a movement towards the non-dominant hand. This sequence integrates the same visual element observed in LIS, reinforcing the iconic representation of the term.

LEXICON

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved-	neutral space	++ vertical	palm facing	X

	open		straight downward	outwards	
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	L-curved-open	neutral space	++ vertical straight downward	palm facing outwards	X
n-dom	X	X	X	X	X

Both LIS and IS utilize the same sign for LEXICON. This sign can be executed with either a horizontal or vertical movement; however, the vertical movement is more prevalent. This preference is likely due to the **iconic** nature of sign languages, as the vertical motion visually represents the format of a dictionary, with a list of words arranged in a vertical sequence.

MARKER

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	G-curved	neutral space	horizontal line on n-dom	palm facing downwards	X
n-dom	5-open	neutral space	still	towards R	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	H	neutral space	++ contact on n-dom	towards L	X
n-dom	5-open	neutral space	still	towards R	X

Both LIS and IS employ the same handshape for the non-dominant hand, which perhaps iconically represents a sheet of paper in this context. In LIS, the dominant hand performs a highlighting action with a handshape reminiscent of a highlighter, effectively emphasizing a particular element on the

"sheet." This action underscores the importance of the highlighted information. Conversely, in IS, the dominant hand utilizes an H handshape, combined with a repeated movement, to signal the relevance and significance of a specific element. This repeated motion reinforces the emphasis on the element's importance within the visual-spatial modality of sign languages.

MORPHEME

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	S^L flat open	neutral space	curved downward movement^still	towards L^palm facing outwards	X
n-dom	S	neutral space	curved downward movement	towards R	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	L-flat-open	neutral space	change of orientation of the hand+contact with n-dom	palm facing downwards^palm facing signer	X
n-dom	5-open	neutral space	change of orientation of the hand	palm facing upwards>palm facing outwards	X

In this case, LIS and IS employ different strategies to convey the concept. LIS utilizes compounding, first performing the sign for "MORPHOLOGY" and then using a classifier that represents a very small entity. This visually connects to the idea of a minimal unit, namely the morpheme. In contrast, IS opts for a single sign, which is less iconic than the compound sign used in LIS. However, IS maintains the same handshape for the dominant hand to indicate the small entity that represents the morpheme, thereby conveying the concept through a different but still effective visual strategy.

MORPHOLOGY

LIS	HS	POA	MOV	OR	NMMs
dom	S	neutral space	curved downward movement	towards L	X
n-dom	S	neutral space	curved downward movement	towards R	X

IS	HS	POA	MOV	OR	NMMs
dom	L-curved	neutral space	change of orientation of the hand+contact with n-dom	palm facing downwards^palm facing signer	X
n-dom	5-open	neutral space	change of orientation of the hand	palm facing upwards>palm facing outwards	X

Etymologically, *morphology* means the study of shapes[25]. The sign used in LIS is commonly employed for SHAPE, thus borrowing a general sign for a more specific term. In IS, a very similar sign to MORPHEME can be observed, with only a change in the handshape of the dominant hand. The distinction lies in the choice of classifiers - in IS, the classifier L-flat open is used for MORPHEME, indicating a smaller entity, while the classifier L-curved is used for MORPHOLOGY, indicating a larger entity. This differentiation in classifier handshapes effectively communicates the relative sizes and conceptual distinctions between the two terms.

MOVEMENT

LIS	HS	POA	MOV	OR	NMMs
dom	A	neutral space	circular	palms facing	X

[25] https://www.treccani.it/enciclopedia/morfologia_(Enciclopedia-Italiana)/#

			movement towards signer	signer	
n-dom	A	neutral space	circular movement towards signer	palms facing signer	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	from side to side	palms facing downwards	X
n-dom	5-flat-closed	neutral space	from side to side	palms facing downwards	X

LIS and IS utilize different signs for MOVEMENT. LIS employs the citational form of the sign MOVEMENT, once again borrowing a sign with a broader meaning for use in a specific context. Notably, if MOVEMENT is considered one of the five parameters of sign language, LIS uses the sign depicted in the linguistic chart. However, for syntactic movement, LIS adopts the sign that IS uses for MOVEMENT. This demonstrates a nuanced approach in LIS, where different signs are selected based on the specific type of movement being referenced, whereas IS maintains a consistent sign for MOVEMENT across contexts.

NEGATION

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	G	neutral space	circular movement ++	palm facing signer	(corrugated eyebrows)
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	A	neutral space	circular movement outwards	palm facing signer>palm facing outwards	(corrugated eyebrows)

n-dom	X	X	X	X	X

In this case, LIS and IS employ different linguistic strategies. The sign for NEGATION in IS would be unsuitable for use in LIS, as it already functions as an idiomatic sign in LIS, meaning "*not to care about something*." This highlights the importance of context and preexisting sign usage within each language, necessitating distinct strategies to convey the same concept.

OBJECT

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	still	palm facing upwards	labialization of “object”
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-curved-closed	neutral space	trembling	palm facing L	labialization of “object”
n-dom	X	X	X	X	X

In this instance, IS employs the strategy of initialization, paired with the lexical mouthing of OBJECT to ensure clarity and avoid ambiguity. Conversely, LIS utilizes a classifier that is commonly associated with both human and non-human entities to signify OBJECT. Optionally, LIS incorporates an additional layer of disambiguation through the initialization strategy. This involves initially forming the sign with a 5-curved-closed handshape, followed by the classifier represented by a 5-flat-closed handshape. This sequential approach is deliberately chosen to prevent confusion with the sign for SUBJECT[26], which also uses a similar classifier handshape. By differentiating the handshapes and employing specific initialization, LIS effectively distinguishes between "OBJECT" and "SUBJECT," ensuring precise communication within the language.

PHONOLOGY (1)

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**

[26] See the chart for SUBJECT.

dom	G	ear>neutral space ipsilateral	spiral movement	palm facing down	X
n-dom	X	X	X	X	X

PHONOLOGY (2)

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	G	eye>neutral space	spiral movement	palm facing down	X
n-dom	X	X	X	X	X

PHONOLOGY (1)

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	4-open	neutral space contact with n-dom	tapping of the fingers on the n-dom	palm facing down	X
n-dom	G	neutral space	still	palm facing down	X

In the context of PHONOLOGY(1), the sign used in LIS refers specifically to the domain of study associated with phonology, namely the study of sound systems. This sign encapsulates the general concept of phonology as it pertains to spoken languages.

For PHONOLOGY(2), which places special emphasis on sign language, LIS employs a different strategy. The sign has the eye as the first place of articulation. This choice is intentional, aiming to convey the concept of phonology within the context of sign language - as them being visual languages - thereby distinguishing it from the broader study of phonology in spoken languages.

In contrast, IS utilizes its own specialized term for phonology. This term is uniquely adapted to encompass the study of phonology within the context of sign language, reflecting the specialized linguistic and structural considerations inherent in visual-manual modalities.

This distinction in approaches highlights how LIS differentiates between general phonology and sign language phonology, using specific handshapes and strategies to convey nuanced meanings. Meanwhile, IS's specialized term demonstrates a tailored adaptation to the needs of the sign language community.

PLURAL

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	from the center to the R_opening and closing of the hand	palm facing upwards	X
n-dom	5-flat-closed	neutral space	from the center to the L_opening and closing of the hand	palm facing upwards	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-closed>5 open	neutral space	from the center to the R_opening of the fingers	palms facing the signer	X
n-dom	5-closed>5 open	neutral space	from the center to the L_opening of the fingers	palms facing the signer	X

LIS employs the citational form of the sign for "MANY" to convey the concept of plurality. This method directly leverages a well-established sign to indicate a large quantity. In contrast, IS utilizes a visual strategy that involves the idea of counting multiple elements to indicate plurality. This approach visually represents the concept of plurality by sequentially or repetitively indicating numerous items, thus effectively communicating the idea of a large number of elements through a counting-like motion. This distinction in strategies highlights the different approaches each language takes to represent the same concept of plurality.

RELATIVE CLAUSE

LIS	HS	POA	MOV	OR	NMMs
dom	F^F-flat-closed	neutral space	straight movement from the signer to outwards^rotated movement from the center to the R	palm facing the signer^palm facing L	X
n-dom	F^F-flat-closed	neutral space	straight movement from the signer to outwards^rotated movement from the center to the R	palm facing outwards^palm facing R	X

IS	HS	POA	MOV	OR	NMMs
dom	R-C	neutral space	R>C	Palm facing outwards	labialization of “Relative Clause”
n-dom	X	X	X	X	X

In the absence of a specific term, IS opts to utilize the strategy of **initialization** to convey the concept. Optionally, the sign for RELATIVE CLAUSE can also be performed with the inzialization of RELATIVE and the citational form of CLAUSE in post-position.

Conversely, LIS employs a more intricate strategy of compounding. The initial part of this compound sign involves both hands forming the F handshape and intertwining them, which iconically represents a relationship or connection between elements - it signifies a degree of relationality, setting the conceptual groundwork. Following this, the sign for CLAUSE is positioned in the post-position, completing the compound structure.

SALIENCY

LIS	HS	POA	MOV	OR	NMMs
dom	5-flat-closed>5-open	neutral space	opening of the fingers	palms facing outwards	(raised eyebrows)
n-dom	5-flat-closed>5-open	neutral space	opening of the fingers	palms facing outwards	(raised eyebrows)

IS	HS	POA	MOV	OR	NMMs
dom	5-open>5-curved	neutral space	upward movement towards signer	palms facing upwards	(raised eyebrows)
n-dom	5-open>5-curved	neutral space	upward movement towards signer	palms facing upwards	(raised eyebrows)

Though they utilize different handshapes, LIS and IS employ a similar visual strategy to convey the concept of saliency[27]. In both languages, the choice of handshape and movement is designed to emphasize that something is relevant and a prominent element. This approach effectively highlights the metaphorical meaning of saliency, as both LIS and IS use specific visual cues. This parallel in visual strategy underscores the shared goal of making key elements stand out, despite the variations in handshape between the two sign languages.

SEMANTIC

LIS	HS	POA	MOV	OR	NMMs
dom	F-flat-closed	chin	circular movement towards the signer	palm facing L	labialization of “Semantic”
n-dom	F-flat-closed	chin	circular movement towards the signer	palm facing R	labialization of “Semantic”

[27] See Appendix 1

IS	HS	POA	MOV	OR	NMMs
dom	V-open	neutral space	change of orientation of the hand+contact with n-dom	palm facing downwards^palm facing signer	X
n-dom	5-open	neutral space	change of orientation of the hand	palm facing upwards>palm facing outwards	X

In LIS, the sign used for SEMANTIC is derived from a sign that in common language means "meaning" or "explain." This sign has been adapted for use as specialized terminology within the linguistic domain to convey the concept of semantics.

Conversely, in IS, there is a specific sign for "SEMANTIC." This sign shares similarities with the sign for "MORPHOLOGY" in that it employs the same handshape for the non-dominant hand and follows a similar type of movement and orientation. This visual and kinetic parallel between the signs for "SEMANTIC" and "MORPHOLOGY" in IS helps to conceptually link the two terms within the broader framework of linguistic studies, even as each sign maintains its distinct meaning and application.

SINGULAR

LIS	HS	POA	MOV	OR	NMMs
dom	G open	neutral space	trembling movement	pam towards the signer	labialization of “singular”
n-dom	X	X	X	X	X

IS	HS	POA	MOV	OR	NMMs
dom	G open	neutral space	trembling movement	pam towards the signer	labialization of “singular”

n-dom	X	X	X	X	X

LIS and IS utilize the same sign for SINGULAR, characterized by the handshape used for the number one. An alternative handshape could be S-open, but G-open is generally more recognized. This sign is accompanied by a trembling movement, which introduces a degree of non-specificity. This trembling movement indicates that the reference is not to a single, specific element but rather to the concept of singularity and individuality. This nuanced use of handshape and movement effectively conveys the idea of being one, emphasizing the abstract notion of singularity rather than a concrete, individual entity.

SUBJECT

LIS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	5-flat-closed	neutral space	still	palm facing upwards	labialization of “subject”
n-dom	X	X	X	X	X

IS	**HS**	**POA**	**MOV**	**OR**	**NMMs**
dom	S	neutral space	slight tremble	palm facing outwards	labialization of “subject”
n-dom	X	X	X	X	X

As indicated in the chart for "OBJECT," the same classifier is used for both "SUBJECT" and "OBJECT" in LIS, as it represents both human and non-human entities. However, to disambiguate between these two concepts, LIS can initialize the sign for "SUBJECT," followed by the classifier with a 5-flat-closed handshape in the post-position. This initialization helps to clearly distinguish "SUBJECT" from "OBJECT."

Similarly, in IS, the strategy of initialization is employed to clarify the concept. For "SUBJECT," IS uses initialization and accompanies it with the lexical mouthing of the word "Subject." This parallel strategy ensures that the intended meaning is explicitly communicated, avoiding any potential confusion between "SUBJECT" and "OBJECT."

SYNTAX

LIS	HS	POA	MOV	OR	NMMs
dom	3-open	neutral space	straight diagonal movement_from center to outwards	palm facing down	X
n-dom	3-open	neutral space	straight diagonal movement_from center towards signer	palm facing R	X

IS	HS	POA	MOV	OR	NMMs
dom	V-curved	neutral space	contact with n-dom	palm facing outwards>signer	X
n-dom	V-curved	neutral space	contact with dom	palm facing signer>outwards	X

LIS places special emphasis on sign language - the non-dominant hand uses a handshape commonly associated with the signs for "SIGN" or "TO SIGN." This choice of handshape is intentional, aiming to convey the concept of syntax within the context of sign language, thereby distinguishing it from the broader study of “Syntax” in spoken languages. In contrast, IS utilizes its own specialized term for phonology.

TOPIC

LIS	HS	POA	MOV	OR	NMMs
dom	G-curved	eyes	short straight upward movement	palm facing L	raised eyebrows
n-dom	G-curved	eyes	short straight upward movement	palm facing R	raised eyebrows

IS	HS	POA	MOV	OR	NMMs
dom	G-curved	eyes	short straight upward movement	palm facing L	raised eyebrows
n-dom	G-curved	eyes	short straight upward movement	palm facing L	raised eyebrows

LIS and IS share the same sign for TOPIC, which involve the visual representation of the specific non-manual markers to indicate topicalization[28]. These markers include raised eyebrows and wide-open eyes.

WH- QUESTION

	HS	POA	MOV	OR	NMMs
dom	W-H^G-curved	neutral space	W>H^curved movement downwards	palm facing outwards	(corrugated eyebrows)
n-dom	X	X	X	X	X

	HS	POA	MOV	OR	NMMs
dom	W-H^G-curved	neutral space	W>H^curved movement downwards	palm facing outwards	(corrugated eyebrows)
n-dom	X	X	X	X	X

Both LIS and IS use fingerspelling (W-H) and then the sign for QUESTION, which is the visual representation of a question mark.

[28] For definition of "Topic" see Appendix 1