
2 The non-native lexicon

Summary 2.1 Borrowings from other sign languages. – 2.2 Borrowings from (neighboring) spoken language. – 2.3 Borrowings from conventionalised gestures.

The present chapter describes the part of the LIS lexicon which derives from the contact with other languages, both signed and spoken. The lexical entries belonging to this set of signs, generally known as non-native lexicon, did not develop naturally within the community of LIS signers and thus can be regarded as borrowed forms.

This chapter provides illustrative examples of borrowings from other sign languages [LEXICON 2.1] and from surrounding spoken languages [LEXICON 2.2]. The most common sources of loan forms in LIS are Italian, the dominant spoken language used in Italy, and ASL, the most influential sign language in the world.

2.1 Borrowings from other sign languages

Increased mobility and social interaction with Deaf people from other countries have created opportunities for LIS signers to get in contact with other sign languages. These circumstances have led to contact phenomena such as lexical borrowings. Borrowed signs from other sign languages typically belong to two categories: toponyms and name signs.

Toponyms are geographical proper names used to denote countries, towns, rivers, mountains, etc. In LIS, the signs referring to ge-

ographical locations outside Italy are frequently borrowed from the sign language used in those locations. For example, the sign RUSSIA is borrowed from Russian Sign Language (RSL).

RUSSIA



For some foreign locations, LIS used to have native toponyms that over the years have been substituted by the signs used by the signing community of those locations. This is the case for the sign AMERICA. In the past, LIS signers used the native sign shown below: the forward arched movement reflected the fact that this is an over-sea country.

AMERICA (native form)

(recreated from Volterra et al. 2019, 174)



Although this sign is still used by some LIS signers, especially the older ones, nowadays signers prefer the sign borrowed from ASL. It is interesting to note that in the source language the sign AMERICA is produced with a circular movement in the horizontal plane (a), whereas in LIS it is articulated with a circular movement in the vertical plane (b).

a. AMERICA (ASL)

(recreated from Volterra et al. 2019, 174)



b. AMERICA (LIS)

(recreated from Volterra et al. 2019, 174)



Other borrowings are name signs referring to internationally famous people (e.g. politicians, historical figures, athletes) and leading figures in the global Deaf community. The source language is the sign language in which the name sign was first used. For example, LIS signers adopt the respective name signs in ASL to refer to Thomas Hopkins Gallaudet (a) and William C. Stokoe Jr. (b), two important American figures in Deaf history.

a. GALLAUDET



b. STOKOE



Interestingly, in the LIS non-native lexicon we also find signs borrowed from other sign languages that entered the lexicon to intro-

duce a new meaning, as in the case of *WORKSHOP* (a) or to replace already existing signs in the target language, as in the case of *GAY* (b).

a. *WORKSHOP*



b. *GAY*



An interesting phonological phenomenon that sometimes can be observed in borrowings is nativisation [PHONOLOGY 3.1.6], namely the adaptation to the phonological inventory and constraints of the target language. This phonological process can be observed in the borrowed sign *WORKSHOP*, shown above. Originally produced with handshape W in ASL, *WORKSHOP* is often articulated with handshape 4 by LIS signers. This adaptation is motivated by the absence of handshape W in the phonemic inventory of LIS.

2.2 Borrowings from (neighboring) spoken language

As similarly observed in other countries, signers in Italy are frequently bimodal bilingual individuals: they use a sign language (i.e. LIS) and they also manage a spoken language (i.e. Italian) to some degree. Because of the bilingual skills in the signing community and the frequent interactions between signers and speakers, language contact phenomena between LIS and Italian are not infrequent. Being LIS a minority language, cross-modality influences mostly occur from Italian to LIS.

This section illustrates the various forms of borrowing that can derive from the contact with the dominant spoken language: calques [LEXICON 2.2.1], lexicalisation of fingerspelling [LEXICON 2.2.2], mouthing [LEXICON 2.2.3], and other marginal types of borrowing [LEXICON 2.2.4].

2.2.1 Calques

A calque consists in a part-by-part translation of a complex form. Calques represent a peculiar contact phenomenon in that they make use of linguistic elements of the target language while imitating structures or functional properties of the source language.

In LIS, we find calques in the lexicon as well as in idiomatic expressions. To illustrate, examples of lexical calques are the toponyms *TREVISO* and *CAMPOBASSO*. Both words *Treviso* and *Campobasso* can be split into two parts: *tre* + *viso* ('three' + 'face') and *campo* + *bas-*

so ('field' + 'low'). The meaning of both parts is somehow reflected in the articulation of these toponyms: the sign TREVISO is articulated with handshape 3 in front of the signer's face (a), while the sign CAMPOBASSO results from the sequential combination of a flat surface followed by the sign LOW (b).

a. TREVISO



b. CAMPOBASSO



The LIS equivalents of Italian idiomatic expressions sometimes result in phraseological calques, which means that the expressions of the source language are literally translated word by word. For example, the Italian idiom *lavarsene le mani* ('to wash one's hands', meaning taking no responsibility for something) is literally translated into LIS as the predicate WASH_HAND.

WASH_HAND

'(To) wash one's hands'



The LIS idiom TAKE_NOSE^AROUND is an interesting case of complex phraseological calque, since it derives from two different Italian idiomatic expressions with similar meaning: *prendere per il naso* ('lead somebody by the nose', lit. 'take by the nose') and *prendere in giro* ('make fun of somebody', lit. 'take in around').

TAKE_NOSE^AROUND

'(To) lead somebody by the nose/make fun of somebody'





























2.2.2 Lexicalisation of fingerspelling

To represent the orthography of the spoken languages, sign languages typically resort to the manual alphabet [PHONOLOGY 1.1.3], commonly known as fingerspelling. The first manual alphabet used in Italy was invented by the clergyman Ottavio Assarotti in Genoa at the beginning of the 19th century. In this alphabet, some letters were realised with the dominant hand only, others required both hands. Moreover, some letters were articulated on body locations, such as on the mouth or close to the eye, while others were produced in the neutral space. This alphabet was used in several education programs for deaf pupils across the country. It even spread to hearing children who learnt it at school as a game and referred to it as *alfabeto muto* ('mute alphabet').

In the Seventies, young LIS signers started to use a different type of fingerspelling, influenced by the international manual alphabet (i.e. the manual alphabet adopted by the World Federation of the Deaf for use at its meetings and events). Even if a few letters were slightly modified from the international version, this new system as a whole can be considered a borrowing from foreign sign languages. The new manual alphabet quickly spread throughout the Italian signing community so much that nowadays most of the signers use it. Only some older signers still stick to the old manual alphabet. Differently from the old one, the new manual alphabet is entirely produced with the dominant hand and does not involve any body location. Because of these features, it is quicker and more efficient to use. The table below shows the new manual alphabet, currently used in Italy.

Table 1 The new manual alphabet used by the Italian signing community

A	B	C	D	E	F	G
						
H	I	J	K	L	M	N
						
O	P	Q	R	S	T	U
						
V	W	X	Y	Z		
						

Most of the letters are reproduced in a static way. A few letters, those accompanied by a yellow arrow in the table, are optionally produced with a movement: R can be articulated with a slight wrist rotation (from prone to supine) and S can be accompanied by a slight contralateral movement. These optional movements usually disappear in fully fingerspelled words. The letters represented with a red arrow must display movement: G requires wrist pivoting (from radial to ulnar), J requires wrist rotation (from prone to supine), and Z must be articulated with a zig-zagging motion resembling the shape of the letter. When used in signed interaction, fingerspelling clear-

ly represents a form of borrowing from spoken languages. It enters the non-native lexicon of LIS in different ways, described below.

First, there are few short words that are systematically conveyed by fingerspelling. Letters are joint by a short path movement and the borrowing, as a whole, is a form of lexicalisation. Two common examples are the sign o-k , which is borrowed from written English, and n-o , a negative sign typically used to express prohibition.

a. o-k



b. n-o



As shown in (b) above, letters could be slightly modified in handshape and orientation for ease of articulation.

Second, LIS signers may resort to one-by-one fingerspelling, which consists in reproducing each letter of a word with the corresponding fingerspelled form. Letters are reproduced one after the other in a certain location of the signing space, namely in the ipsilateral side at chin level. In the example below, the proper noun Federico is reproduced by full fingerspelling.

F-E-D-E-R-I-C-O



One-by-one fingerspelling is employed to express concepts that do not have a corresponding sign in LIS (or one is not known). This strategy is mostly, but not exclusively, used with proper nouns referring to individuals, toponyms, brand names, and neologisms [LEXICON 3.1.2].

After a word is provided with one-by-one fingerspelling, it can be repeated in the discourse by producing a so-called single-letter sign: this form, articulated in the neutral space, selects the handshape associated with the first letter and combines it with a default motion, be it a short circular movement or a repeated horizontal movement. Single-letter signs represent an economic strategy since they are quicker than fully fingerspelled forms. In the example below, we can see how this process applies to the proper noun Federico, previously introduced with one-by-one fingerspelling.

FEDERICO



It is important to highlight that single-letter signs are limited to particular discourse contexts and are not conventionalised in LIS lexicon. For these reasons, this linguistic phenomenon is sometimes re-

ferred to as *local lexicalisation*. In order to be intelligible, single-letter signs are accompanied by full mouthing [LEXICON 2.2.3.1].

Another way to integrate fingerspelling in signed discourse is initialisation. This phenomenon occurs when the handshape of a sign represents the first letter of the corresponding spoken word. Differently from single-letter signs, initialised signs are conventionalised signs characterised by a defined movement and a defined location. An example of initialised sign in LIS is LAW. As shown in the figure below, the dominant hand is articulated with handshape L corresponding to the first letter of the corresponding Italian word (*legge*, 'law') on the non-dominant hand.



LAW

For more details on initialisation, the reader is referred to [LEXICON 2.2.2.1].

In some cases, more than one letter from the corresponding spoken word is selected. These are known as multiple-letter signs. To illustrate, the toponym BARI is articulated with two different handshapes: B followed by I, the first and the last letters of the corresponding spoken word.

BARI



Various subtypes of multiple-letter signs are found in LIS. For more details, the reader is referred to [LEXICON 2.2.2.2].

The last type of borrowed form involving fingerspelling is a complex form in which fingerspelling is followed by a lexical sign. This combination can be observed in the sign for the Italian region Lombardy: it is composed by the first letter of the corresponding spoken word (*Lombardia*) and the sign AREA articulated in the vertical plane.

L[^]AREA
'Lombardy'

This type of sign formation is quite productive in the category of Italian regions.

2.2.2.1 Initialisation

Initialised signs display a fingerspelling handshape representing the first letter of the corresponding Italian word. There are quite a few initialised signs in the LIS lexicon, especially in two categories: days of the week and toponyms. For instance, the sign MONDAY (Ita. *lunedì*) is realised with handshape L (a) and the sign for the Italian city VICENZA is realised with handshape V (b).



a. MONDAY



b. VICENZA

Frequent handshapes used in initialised signs in LIS are V, L, C, and D.

It is interesting to note that some initialised signs employ handshapes from the old manual alphabet [LEXICON 2.2.2]. For example, we can find the old handshape T in a variant form of the sign TAXI.



TAXI

As an effect of diachronic change, old fingerspelled handshapes in initialised signs tend to be replaced by the corresponding new fingerspelled handshapes. For instance, the sign for Sunday (Ita. *domenica*) used to be articulated with the old D handshape, while nowadays the same sign is preferably produced with the new D handshape.



a. SUNDAY (old sign)
(recreated from Radutzky 2009, 33)



b. SUNDAY (new sign)
(recreated from Radutzky 2009, 33)

Most of initialised signs in LIS select the handshape corresponding to the first letter of the corresponding Italian word. However, there are a few special cases in which the handshape of the sign reproduces another letter, different from the first one. The signs WEDNESDAY (Ita. *mercoledì*) and EX (Ita. *ex*) are such cases. As for

WEDNESDAY, the handshape reproduces the second letter of the Italian equivalent (E).



WEDNESDAY

The peculiar choice of reproducing a non-first letter is well motivated. On the one hand, the sign for Wednesday needs to overcome a conflict with another day of the week. The initialised signs TUESDAY and WEDNESDAY, both derived by Italian words starting with M (*martedì* and *mercoledì*, respectively), need to select different letters to avoid possible misunderstandings: so, Tuesday reproduces the first letter of the Italian equivalent (M), while WEDNESDAY reproduces the second one (E). For ease of comparison, the sign TUESDAY is provided below.



TUESDAY

The sign EX is another special case because it is articulated with the old handshape X, corresponding to the second (and last) letter of the Italian equivalent.



EX

The selection of X is probably motivated by the choice to highlight the letter with the highest visual impact.

2.2.2.2 Multiple-letter signs

Multiple-letter signs are conventionalised signs derived from fingerspelling in which more than one letter is reproduced. In this category, in LIS, we usually observe two-letter signs.

An example is the sign LIS itself. It was originally realised as a full fingerspelled form of the acronym (L-I-S), as in (a), but over the years it has changed to a two-letter sign including only the first and the last letters (L-S), as in (b).

a. LIS (old sign)



b. LIS (new sign)



There is also a case of multiple-letter sign realised with the old manual alphabet [LEXICON 2.2.2], that is the sign for the Sicilian city Enna. It combines the first and second letters: old handshape E and old handshape N (which is identical to the N handshape of the new manual alphabet).

ENNA



Multiple-letter signs are also used for multiword expressions. In the examples below, we show two-letter signs derived from non-Italian expressions: *bed and breakfast* and *curriculum vitae*.

a. BED_AND_BREAKFAST



b. CURRICULUM_VITAE



In both cases, the selected handshapes refer to the first letter of each relevant word: B-B for *Bed and Breakfast* and C-V for *Curriculum Vitae*.

Most of the multiple-letter signs in LIS display the handshapes in a sequential way. However, in some very rare cases, handshapes can be produced simultaneously. For example, the sign YES (Ita. *si*) is realised with handshape Y, which combines the two handshapes included in the Italian equivalent: S (extended thumb) and I (extended pinky).

YES



Certain fingerspelled signs may undergo a process of phonological reduction. This phenomenon can be observed in the toponym used to refer to the Italian city Lecce, which is a two-letter sign composed by L followed by bent L. The latter handshape looks as a reduced version of handshape E (the second letter of the corresponding word), which is conventionally articulated by bending all fingers.

LECCE



2.2.3 Mouthing

The articulation of LIS signs is frequently simultaneously combined with mouthing, i.e. mouth movements that voicelessly reproduce the full or partial articulation of the corresponding Italian word. The significant use of mouthings in LIS is probably due to the strong oralist tradition in Italian deaf education [SOCIO-HISTORICAL BACKGROUND 1]. From a functional perspective, mouthing represents a form of co-sign gesture (similar to co-speech gestures in spoken languages) and enhances intelligibility.

The relevant section in the Phonology Chapter [PHONOLOGY 1.5.2] describes the phonological role of mouthing and its relationship with the associated manual sign. In this section, the focus is on the role of mouthing as part of LIS non-native lexicon. Indeed, it represents a clear case of borrowing from spoken Italian. Since the linguistic competence in Italian is not homogeneous among the signing community, the use of mouthings shows a great degree of variation across signers. Generally speaking, mouthing tends to reproduce: i) high-frequency words, ii) lexical words (rather than functional words), iii) more frequently nouns and adjectives and less frequently verbs.

The extension of mouthing is usually dependent on the duration of the associated manual sign. To illustrate, the sign STREET (Ita. *strada*) and the corresponding mouthing are articulated at the same time.

'strada'
STREET



In some cases, we can observe a prolonged articulation in correspondence with a particular Italian phoneme. In the example below, the sign LONG_LASTING (Ita. *lungo*) is articulated with a prolonged movement and the associated mouthing is typically characterized by the prolonged articulation of the vowel [u].

[luuuuuungo]
LONG_LASTING



This lengthening in the mouthing component matches the timing of the hand movement.

In signed discourse, we often observe the spreading of the mouthing of a single Italian word over more than one sign. This is shown in the two examples below: in the first one, the mouthing corresponding to BOOK (Ita. *libro*) spreads over both BOOK and the verb CL(flat open 5): 'give_book'; in the second one, the mouthing usually associated with COFFEE (Ita. *caffè*) spreads over the entire interrogative clause.

'libro'
a. BOOK₁CL(flat open 5): 'give_book'₂
'I give you the book.'



'caffè'
y/n
b. COFFEE WANT IX₂
'Do you want coffee?'



As we can observe in the examples above, the use of mouthings is constrained by the articulation of signs and deviates from the combinatory rules typical of Italian. An exception to this generalisation is represented by a few phraseological routines. These are high-frequency Italian constructions usually containing functional elements such as negation that are faithfully reproduced in a string of mouthings despite the different ordering of the co-articulated manual signs. The example below shows a mismatch between sign order and mouthing order: as required by LIS syntax, the negative predicate EXIST. NOT follows the noun PROBLEM, whereas the negative mouthing 'non c'è' (Eng. 'there is not') precedes the noun mouthing 'problema' (Eng. 'problem'), as required by Italian syntax.

'non c'è problema'

neg

PROBLEM EXIST.NOT

'There is no problem.'



2.2.3.1 Full forms

When the mouthing reproduces the corresponding Italian word in its entirety, it is classified as full form. Full mouthings may be redundant in that they express the same meaning of the associated manual signs, or they may be used to disambiguate the meaning of homonyms (i.e. signs with identical manual forms but different meanings)

[PHONOLOGY 1.5.2].

Full mouthings are usually found in combination with nouns, such as NAME ('nome'), DOCTOR ('dottore'), and HOUSE ('casa').

'nome'

NAME



However, they can also co-occur with other word classes. We find full mouthings in combination with adverbials, such as YESTERDAY ('ieri') (a), NEVER ('mai'), and WELL ('bene'), as well as with adjectives, such as GOOD ('buono') (b), NEW ('nuovo'), and BEAUTIFUL ('bello').

'ieri'

a. YESTERDAY

'buono'

b. GOOD



2.2.3.2 Reduced forms

When the mouthing reproduces a part of the corresponding Italian word, it is classified as reduced form. As mouthing shows a high degree of variation among signers, it is not possible to identify rules determining how the word should be exactly reduced. However, some general tendencies can be observed. In most cases, reduced forms preserve: i) the initial part of the word, ii) the visually most salient phonemes.

Truncation tends to occur right after the tonic syllable of the word. A couple of examples are provided below: FINISHED (Ita. *finito*) (a) and WORK (Ita. *lavòro*) (b).

[fini]
a. FINISHED



[lavo]
b. WORK



Sometimes, truncation occurs after an atonic syllable, so the tonic syllable is deleted. This can be observed, for example, in the sign WHY, which is typically accompanied by the partial mouthing [mo], which results from the truncation of the Italian word *motivo* ('reason') occurring before the tonic syllable [ti].

[mo]
wh
WHY



In a few instances, the reduced form is limited to the articulation of the only tonic syllable in word-internal position. For example, the sign IDENTICAL (Ita. *uguale*) is commonly accompanied by the reduced form [gua], corresponding to the tonic syllable.

[gua]
IDENTICAL



When reduced forms are used, they typically extend over one manual sign only. So, spreading phenomena over more than one sign are generally not observed.

2.2.3.3 Mouthing and fingerspelling

To be developed.

2.2.4 Other marginal types of borrowing

In the category of borrowing from spoken languages, further idiosyncratic cases of borrowing are worth a mention.

First, the shape of a written letter can be reproduced by a body part to form a so-called *word picture*. An example of this phenomenon is the sign DVD, which is found in other sign languages as well and probably represents a borrowed form.



DVD

In this sign, all the three letters of the English acronym are represented: the initial and final Ds are shown by the D handshape articulated by the dominant and non-dominant hands, while the letter V can be observed in the intersection created by crossing the forearms.

Second, a few borrowings are derived from mistranslations. This is the case when two phonologically similar or identical forms in the spoken language are translated by a single sign despite being semantically unrelated. For example, the acronym CONI (*Comitato Olimpico Nazionale Italiano*, 'Italian National Olympic Committee') is phonologically identical to the Italian word *coni* ('ice cream cones'). Although the two meanings are not related, CONI is often translated into LIS by using the same sign for 'ice cream'.



CONI

(recreated from Volterra et al. 2019, 179)

Another similar case of borrowing derived from phonological similarity of forms in the spoken language can be observed in a variant form of KINDERGARTEN. This symmetrical two-handed sign is articulated by flattening index and middle fingers (unspread V handshape) close to the temples.



KINDERGARTEN
(based on Bertone 2011, 87)

From a phonological perspective, KINDERGARTEN is very similar to the sign DONKEY, with the only difference that the latter sign selects unspread 5 handshape (rather than unspread V handshape). The similarity between KINDERGARTEN and DONKEY reflects the similarity between the Italian corresponding words: *asilo* ('kindergarten') and *asino* ('donkey'). These two words are semantically unrelated, but they look very similar when lip read.

Finally, we find some idiosyncratic forms of borrowing derived from speech therapy practice. These signs reproduce the strategy that therapists used to rely on to teach deaf children how to pronounce particular phonemes of spoken Italian. For example, an old variant of GRANDFATHER (Ita. *nonno*) is realised by pressing the ipsilateral nostril with the index finger. Such strategy was used to teach the pronunciation of the nasal [n] since it allows to perceive the resonance of this phoneme through touch.

GRANDFATHER



Another borrowing derived from speech therapy is the sign AUNT (Ita. *zia*), which is realised by brushing the radial side of the index finger under the chin. Such strategy was used to teach the pronunciation of the alveolar affricate [dz] since it allows to feel the vibration produced by this phoneme.

AUNT



The sign is usually accompanied by visible teeth, which is the mouth configuration that can be observed while pronouncing [dz].

2.3 Borrowings from conventionalised gestures

It is well known that when Italian people communicate, they usually move their hands a lot: specifically, they produce co-speech gestures to add emphasis, express emotions, or clarify what they are saying. Gestures are used throughout the country, especially in the Southern regions. Due to the everyday interactions between hearing and deaf people, some of these gestures have become conventionalised in LIS to the point that they are systematically used by the signing community. For example, the Italian culture-specific gesture meaning ‘fear’ or ‘be afraid of’ is integrated in LIS lexicon as a sign.

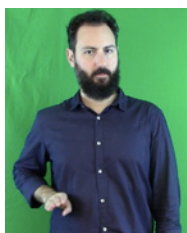
FEAR



Signs derived from gestures can be considered borrowed forms and are thus part of the LIS non-native lexicon. Two distinct linguistic processes may be involved, depending on the function assumed by the borrowed form: lexicalisation and grammaticalisation. If the gesture undergoes lexicalisation, it enters the lexicon as a content item (i.e. lexical unit). On the other hand, if a gesture is grammaticalized, it is used to fulfil a grammatical function. These two processes are further explained and exemplified in [LEXICON 2.3.1] and [LEXICON 2.3.2].

2.3.1 Lexical functions

The borrowed gestures that have entered the LIS lexicon as lexical items can belong to different lexical categories. To illustrate, the examples below show the noun HUNGER (a), the verb CARE_NOT (b), and the adjective DELICIOUS (c).



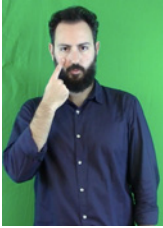
a. HUNGER

b. CARE_NOT
‘Don’t care’

c. DELICIOUS



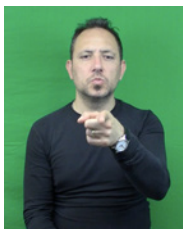
Being originated from gestures, these three signs are fully recognisable by Italian non-signers as well. Crucially, as signs, they are integrated in the LIS structure and are used compositionally (i.e. their meaning contributes to the interpretation of the sentence). As a final note, there are quite a few LIS signs derived from a universal gesture, namely the deictic pointing gesture. This is used on a worldwide scale to refer to contextually relevant entities, and it is one of the main gestures produced by babies. Some of these deictic pointing gestures, especially those referring to body parts, have become so conventionalised in signing interactions as to enter the LIS lexicon. For example, signs originated from pointing gestures are **EYE** (pointing to eye) and **RED** (pointing to lips).

a. **EYE**b. **RED**

2.3.2 Grammatical functions

The borrowed gestures that have entered the LIS lexicon to fulfil grammatical functions are articulated either manually or non-manually.

As for manual forms, consider again deictic pointing gestures. Some have been grammaticalized and are used with different pronominal functions: as personal pronouns (a), demonstrative pronouns (b), and locative pronouns (c).



a. IX₂
'You'



b. IX(dem)_[proximal]
'This (one)'



c. IX(loc)_[proximal]
'Here'

For more details on these pronominal forms, see the relevant description in [LEXICON 3.7].

One of the most popular Italian gestures is articulated in front of the signer's body with flat closed 5 handshape. It may be static or articulated with repeated wrist nodding (from palm to back). This gesture is typically used to express lack of understanding (if accompanied by neutral facial expressions) or disapproval (if accompanied by furrowed eyebrows). In the former interpretation, it may accompany interrogative pronouns such as *cosa*, 'what'. In the latter interpretation, it may accompany Italian sentences such as *cosa vuoi?!*, 'what do you want?!' or *cosa stai dicendo?!*, 'what are you talking

about?!'. This gesture has been grammaticalized to the point that it is now used by LIS signers as a regular *wh*- sign, commonly glossed as $Q_{\text{artichoke}}$ [LEXICON 3.7.5].



$Q_{\text{artichoke}}$
'Who/what/where/how/why/when/which'

In LIS, this sign is used as a generic interrogative pronoun in that it can replace any *wh*- sign (WHO, WHAT, WHERE, HOW, WHY, WHEN, WHICH).

Moreover, there are gestures that have entered the LIS lexicon as negative forms. This is the case with the signs NOT and EXIST.NOT, both derived from well-established Italian gestures.

hs
a. NOT



hs
b. EXIST.NOT



'There is not/do not exist/do not have'

Note that the two signs shown above are obligatorily accompanied by side-to-side headshake. This feature derives from a popular non-manual gesture, which can occur either in isolation (without speech) or with negative Italian words/expressions. As a gesture, this kind of headshake is used to express or reinforce negation but, crucially, it is not obligatorily required by negative words or sentences in Italian. Conversely, in LIS, it is compulsory in negative clauses, and its distribution is grammatically constrained in that it commonly co-occurs with the negative sign only [SYNTAX 1.5.2]. For these reasons, we can say that side-to-side headshake behaves as a grammatical element.

Information on Data and Consultants

The descriptions in this chapter are based partially on the references below and on the elicitation of new data. The linguistic data illustrated as images and video clips have been checked through acceptability judgments and have been reproduced by Deaf native-signing consultants.

Authorship Information

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