TRANSLATION AND SIGNED LANGUAGE: HIGHLIGHTING THE VISUAL-GESTURAL MODALITY

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Abstract: Linguistic Studies and Sign Language Translation and Interpreting Studies have highlighted the characteristics and effects of the visual--gestural modality. Considering this, we briefly study the translation and interpreting processes that occur between a *visual-gestural* and a *vocal--auditory* language, which have been termed *intermodal*, as opposed to processes that take place within the same language modality (*intramodal*). We distinguish *translation* process from the *interpreting* process, demonstrating that although these processes share several characteristics, they are operationally and cognitively different. Based on this, we reflect on the modality issue regarding the categorization of the intermodal processes, translation and interpreting, and their impacts on them. We have seen that the study of modality and its effects on the translation and interpreting process must be conceived as one of the elements of translation competence for the intermodal translator or interpreter.

Keywords: Sign Language. Modality. Translation. Interpreting. Intermodal.

TRADUÇÃO E LÍNGUA DE SINAIS: A MODALIDADE GESTUAL-VISUAL EM DESTAQUE

Resumo: Os Estudos Linguísticos e os Estudos da Tradução e da Interpretação de Línguas de Sinais têm colocado em evidencia as características e efeitos da modalidade gestual-visual. Considerando isso, realizamos uma breve reflexão sobre os processos tradutórios e interpretativos que ocorrem entre uma língua *gestual-visual* e outra *vocal-auditiva*, os quais têm

sido denominados de *intermodais*, em oposição àqueles processos que se realizam numa mesma modalidade de língua: os *intramodais*. Para tanto, diferenciamos a *tradução*, propriamente dita, da *interpretação*, demonstrando que, embora esses processos compartilhem diversas características, eles se distinguem operacional e cognitivamente. A partir dessa diferenciação, refletimos sobre a questão da modalidade em relação à categorização dos processos tradutórios e interpretativos intermodais e de seus impactos sobre eles. Vimos que o trabalho com a modalidade e com seus efeitos sobre o processo de tradução e de interpretação precisa ser concebido como um dos elementos que compõem a Competência Tradutória do profissional tradutor ou intérprete intermodal.

Palavras-chave: Língua de Sinais. Modalidade. Tradução. Interpretação. Intermodal.

Introduction

The recognition of the possibility and existence of another language modality, the visual-gestural one, has significantly impacted the fields of linguistics and applied linguistics in their different interfaces. It is undeniable that language modality is central to Sign Language Linguistics. Regardless of the perspective or the theoretical approach employed in the study of sign languages, the issue of modality inevitably arises. The same applies to the field of Sign Language Translation and Interpreting Studies. According to Rodrigues and Beer (2015, 23; my translation), research on sign language translation and interpreting "are part of the Translation Studies and Interpreting Studies, respectively, and stand as a specific aspect as they discuss the implications of the visual-gestural modality to these disciplines, expanding and diversifying their possibilities of analysis and reflection.".

Thus, we present a brief reflection on the processes of translation and interpreting that occur between visual-gestural and vocal-auditory languages, which have been termed *intermodal*, as opposed to the processes carried out within the same language modality (i.e., intramodal, which is also known as monomodal in some cases). Firstly, we differentiate translation from interpreting,

showing that they differ operationally and cognitively, despite sharing several characteristics. Based on this differentiation, we reflect on the issue of modality in relation to the categorization of the intermodal translational and interpretative processes and on the impacts of modality on them.

Current research shows that the effects of modality are related, for example, to the different properties of sign languages articulators and, in turn, to their visual perception, making it possible to explore simultaneity and employ other special linguistic devices proper of sign languages. Thus, we conclude by stating that modality and its effects on sign language and on the translation and interpreting process must be understood as one of the elements of the translation competence required from the professionals that work with languages of different modalities.

Translation and translating vs. interpretation and interpreting

Many authors have devoted much work to define *translation / translating* and *interpretation / interpreting*, seeking to demonstrate what these two activities have in common and how they differ. These concepts are extremely important, especially when one intends to understand the nuances and specificities of each of these activities. Despite the specialized literature, it is common to see these terms being used indistinctly or even misguidedly, especially by those unfamiliar with the disciplines of Translation Studies (Venuti 2000) and Interpreting Studies (Pöchhacker and Shlesinger 2002).

Over the last five decades, these concepts have become increasingly specialized, gaining firmer contours and stricter meanings. It is noteworthy, however, that the word *translation* has often been used as a hypernym to refer to translation and interpretation activities interchangeably. In addition, as Pinheiro de Souza states,

> […] the term translation itself is *polysemic* and can mean (a) the **product** (the translated text); (b) the **process** of the translation; (c) the **craft** (the activity of translating); or (d) the **discipline** (interdisciplinary and / or autonomous study). The way in which translation is conceptualized varies according to the polysemy of the term and the different perspectives of translation theorists. (1998, 51; emphasis added, my translation).

We also find the strict use of the term translation, as opposed to interpreting. We see this, for example, in the development of Interpreting Studies and its search for identity and autonomy regarding the specificity of its central object of investigation, which is interpreting and not translation in its strict sense.

Another aspect worth mentioning is the fact that many definitions of translation and interpretation are coined primarily as the opposition between written text and oral discourse. This seems to be the starting point used to draw a line between translation and interpretation. By contrasting language in use (oral discourse) with its written form, several authors offer the possibility of thinking about the two activities through specific characteristics, which, although originating from a common denominator, are characterized and developed in different ways.

Both oral and written languages are social practices experienced daily by the vast majority of the world population. While the former is often acquired informally and naturally, the latter is usually learned in formal contexts and is institutionally conducted. It can be said that writing is more than just a technology for registering language, since it is an essential and sometimes indispensable part of social coexistence. In the same way, we see that, prior to the written tradition, oral tradition was a central element in the history of mankind (Marchuschi 1997).

When comparing *speech* and *writing*, it stands out that speech depends on nothing other than the body to be produced. Thus, speech, be it oral or gestural (i.e., in signed languages), does not

depend on a specific technology for its production. On the other hand, there is no writing without the use of a specific technology for such purpose. In short, speech and writing are different and have their own characteristics.

The Commission of the European Communities' booklet with information regarding the interpreter training course mentions that interpreters and translators are often confused. However, it states that the translator works with the written word, whereas the interpreter works with the spoken word (Pagura 2003). In this perspective, we can find similar statements from several other authors, such as: "we call translation the conversion of a text written in one language (the source language) to another (the target language); we consider interpretation the conversion of an oral discourse, from a source language to a target language" (Pagura 2015, 183; my translation).

Based on the assumption that 'translation is written, and interpretation is oral', Pagura (2015) states that there is a different operationalization between the two processes, although being considered essentially similar. He explains that there are "excellent translators who cannot understand the oral variety of the language from which they translate" (Pagura, 2015: 184, my translation). According to the author, translators and interpreters should be competent in their working languages. Nevertheless, the skills required from translators are more directly related to the domain of writing whereas those of interpreters relate to oral expression: subtleties of pronunciation, nuances of intonation, regional variants, etc.

When investigating the definitions of the terms 'interpret' and 'interpreter' and their translation into different languages, Peter Mead (1999) noted that his sources of research consistently recognized the importance of communication to the interpreter's role (i.e., skills related to the understanding and production of oral discourse). He also mentions that, in several of the analyzed definitions, one of the main points in common "is their dependence on the concept of translating, stated by all of them to be specifically oral in nature" (Mead 1999, 200).

Seeking to reflect on a typology for interpretation, Pires Pereira (2015) briefly present the differences between translation and interpreting and proposed that interpreting should be understood as "a phenomenon of general translation (language A ⮂ language B), performed orally in the target language (spoken, signed or tactile), with or without preparation and testing, in which the interpreter's body is, in addition to the means of production, the product itself" (Pires Pereira 2015, 51; my translation).

Daniel Gile, an important researcher in the Translation and Interpreting Studies, distinguishes *oral discourse* from *written texts*, addressing interpreting as the "oral translation of oral discourse" (1998, 40). According to Gile, oral speech is characterized as a sequence of sounds produced orally and perceived auditorily. On the other hand, written texts are presented graphically by a sequence of words separated by blank spaces, being visually perceived. In sum, oral discourse has specific properties, such as intonation, rhythm, dynamics, intensity, expressiveness, etc., while properties of the written texts include letters, punctuation, signs, linguistic descriptions, etc.

In the *Conference Interpreting, historical and cognitive perspectives* entry in the second edition of the Routledge Encyclopedia of Translation Studies (Baker, Saldanha 2009), Gile states that "interpreting is the oral or signed translation of oral or signed discourse, as opposed to the oral translation of written texts. The latter is known as sight translation" (Gile 2009, 51).

Regarding the interfaces between written translation and simultaneous interpreting, Alves and Pagura (2002) emphasize that the cognitive and operational differences between these two modes begin with comprehension. They mention that the translator can process the task at his / her own pace and use external support such as dictionaries, glossaries, the Internet, etc. On the other hand, the interpreter must solve problems immediately without external support or following his / her own rhythm.

In the beginning of their text, the above-mentioned authors present a brief explanatory note that associates the concept of translating

with processing written texts and interpreting with processing oral texts. They state that "the term *interpreting* should be understood as the oral rendering of interlingual communication processes including consecutive and simultaneous interpreting whereas the term *translating* encompasses the written mode of interlingual text rendering" (Alves, Pagura 2002, 74). Therefore, despite sharing processes of comprehension, analysis and reformulation of the languages involved, translation requires *a priori* reading and comprehension skills, and an ability of producing written texts, while interpreting requires listening and comprehension skills, and an ability of producing oral texts.

In *Introducing Interpreting Studies*, Franz Pöchhacker (2004) reflects on the conceptualization of interpreting as a special form of 'Translation' (translation in its generic, hyperonymic sense). Starting from a brief etymological analysis, the author searches for the different uses and meanings ascribed to the term. He states that the interpreting performance happens 'here and now' and that such immediacy is the feature that distinguishes it from other forms of translation, without resorting to the dichotomy of oral vs. written.

Pöchhacker assumes the concept developed by Otto Kade in the early 1960s, which defines interpreting as a form of translation in which "the source-language text is presented only once and thus cannot be reviewed or replayed, and the target-language text is produced under time pressure, with little chance for correction and revision" (Kade 1968 *apud* Pöchhacker 2004, 10). The author recognizes interpreting as a form of translation, conceptualizes it as a distinct and specific activity and acknowledges it within the perspectives and reach of translation theories.

Pöchhacker states that interpreting is "[…] 'real-time' human translation in an essentially shared communicative context" (Pöchhacker 2009, 128). The characterization of interpreting as an instantaneous type of translational activity, performed in real time for immediate use, highlights the criteria of *ephemeral presentation* and *immediate production* that distinguishes interpreting from other translational phenomena. Hence, based on Kade (1968),

Pöchhacker defines interpreting as "[...] a translational activity in which a first and final rendition in another language is produced on the basis of a one-time presentation of an utterance (or text) in a source language" (Pöchhacker 2009, 133). Interpreting cannot be planned in advance, since the interval between the cognitive processing of the received text and the offering of the interpreted text is minimal. In fact, interpreting is planned during its own performance.

We should also consider that the situational context in which the activities take place can be seen as a distinguishing element. Interpreting is context dependent and characterized by many situations of international or intra-social nature, involving the professional and the client / audience: educational, academic, political, religious, legal, family, medical, and other contexts. On the other hand, translating is context independent and the translator can determine his own work context, given that the process of translating does not require the presence of the client / audience (Cavallo, Reuillard 2016). Therefore, by directly involving the client or the audience, interpreting can assume different interactional perspectives. It may present as either a monologic bias, which is more common in conference settings, or as a dialogic bias more specific to community settings or interpreting in public services.

Based on the different reflections presented by the aforementioned authors, we can deduce that there are operational and cognitive differences that distinguish 'translation and translating' from 'interpretation and interpreting'. Based on some of these differences, we propose four aspects that may help identify these processes: (A) the type of text (source text – ST); (B) the mode of production; (C) the phases within the process; and (D) the characteristics of the final product (target text – TT).
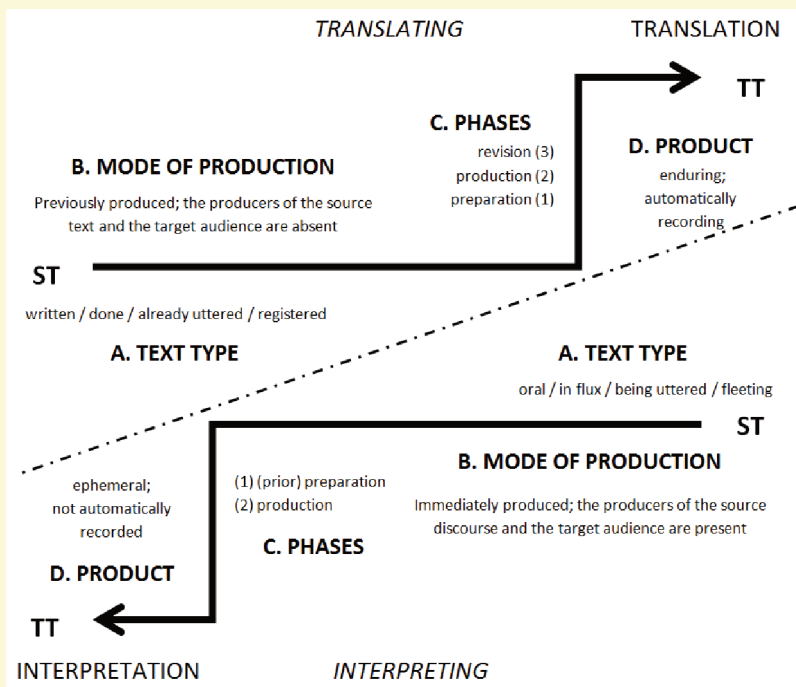
Figure 1 Differences between the process of translation and interpreting.

These four aspects unfold into others that may also contribute to the distinction of translation and interpreting (Figure 1). The mode of the source text affects the way the professional is going to deal with it. For example, if the text is placed in a physical or virtual support that serves as the basis for its materialization, it becomes available to the professional. In this sense, the professional can translate at his / her own pace, as long as the client / audience is not present nor demanding the final work, unlike what happens in sight translation (also known as sight interpreting).

If the professional does not have access to the materialized text in a support (physical or virtual), he cannot translate it. If professional receives the text while it is being produced, he / her will have to adjust to the rhythm of the author and interpret it to

the audience. Nevertheless, in extreme cases, the interpreting may be video or audio recorded to be handed in later. Hence, we see that our first criterion (i.e., text type) relates to other distinctive aspects of the translation and interpreting processes, such as the kinds of cognitive and operational efforts that they require from the professional.

It is noteworthy that there may be situations in which a text, despite being registered on a physical or virtual support, will not available to the translator, leading to the impossibility of working at his / her own pace. In such cases, the characteristics of the process will distance from translation and approach interpreting. For example, in the case of an urgent deadline, a professional may receive an audio recording of a news article and have to produce an immediate 'translation' of it, without being able to hear it before performing. In this case, despite being a recorded discourse, the final product tends more toward interpreting (in this case, simultaneous) than to translation.

Thus, translation and interpreting are linguistic, communicative, cognitive, cultural and textual processes that involve different communities or social groups. Nevertheless, the operational and cognitive differences existent between these two activities are evident, as shown above. The table below (Table 1) summarizes some of these differences:

Table 1 Operational and cognitive differences between translation and interpreting

	TRANSLATION	INTERPRETING
Language skills and abilities	Prioritization of the skills required to deal with the written modality: reading and writing.	Prioritization of the skills required to deal with the oral modality: listening and speaking.
Work rhythm	The professional sets his / her own pace according to time pressure.	The author of the speech imposes his / her own rhythm; the professional must to adjust to it.

Presentation of the source text	The text is available on a support (physical or virtual), can be reread and the professional can review it as needed.	The text is in constant flux and, in most cases, cannot be seen again or repeated, even if the professional needs it.
Work method	The job can be paused or organized into stages.	It is almost impossible to interrupt, delay or fragment the work.
External support (materials and other resources)	External support can be sought in glossaries, dictionaries, colleagues and other translations.	There is little or no external support, basically resorting to memory or, immediately, the work partner, albeit to a limited extent.
Possibility of correction before delivery	The text can be completely revised making necessary adjustments and changes.	No changes can be made without being seen by the audience.
Situational aspects of the activity	Limited context focused on the translator's workspace.	Multiple contexts, from intrasocial to international.
Use of technology	Indispensable, writing tools and materials are essential.	Dispensable, can occur with nothing more than the body itself.
Contact with the client / audience	Indirect, minimal or non-existent contact, often with a large time lag between the process of translation and the delivery of the final product.	Direct, meaningful and effective contact, most often with the audience present at the time of the interpreting.

Finally, we can conceptualize the process of interlinguistic Translation (in its generic sense) in a broader way, resorting to Hurtado Albir's definition and understanding of it as an "[…] interpretative and communicative process that consists of reformulating a text through the means of another language and that is elaborated within a social context and with a specific purpose" (2005, 41; my translation). However, the intrinsic characteristics, mode of implementation and specific demands of the process divide

the interlinguistic translation into at least two distinct varieties: translation and interpreting.

Translation, interpreting and (visual-gestural) modality

Sign languages cannot be addressed without considering the visual-gestural modality, which imparts singular characteristics and effects on these languages. Nevertheless, the similarities between spoken and signed languages demonstrate that the properties of a linguistic system are not reduced to its modality but transcend it. According to McBurney,

> […] the "modality" of a language can be defined as the physical or biological systems of transmission on which the phonetics of a language relies. There are separate systems for production and perception. For spoken languages, production relies upon the vocal system, while perception relies on the auditory system. Spoken languages can be categorized, then, as being expressed in the **vocal–auditory modality**. Signed languages, on the other hand, rely on the gestural system for production and the visual system for perception. As such, signed languages are expressed in the **visual–gestural modality**. (McBurney 2004, 351; emphasis added).

The mechanisms of production and perception in sign languages are different from those of spoken languages. While in the vocal-auditory languages the production of speech is internal to the body and practically invisible (oral articulators largely hidden, relatively small and not paired), in gestural-visual languages it is external to the body and, therefore, visible (sign articulators move in a transparent space, relatively massive and paired). According to Meier,

[...] the oral articulators are small and largely hidden within the oral cavity; the fact that only some of their movements are visible to the addressee accounts for the failure of lipreading as a means of understanding speech. In contrast, the manual articulators are relatively large. Moreover, the sign articulators are paired; the production of many signs entails the co-ordinated action of the two arms and hands. (2004, 7-8).

Sign languages explore simultaneity in the constitution of signs and sentences, due to the characteristics of the visual-gestural modality. They do not depend on the use of prepositions, conjunctions or articles, and construct their syntactic relations through the structured use of space. In addition, sign languages make simultaneous encoding of linguistic information which enhances the information density of signs ('densely packed signs') and economize, since many types of grammatical morphemes frequent in vocal-auditory languages are not used (Klima, Bellugi 1979, Meier 2004, Quadros, Karnopp 2004).

Table 2 Differences between vocal-auditory and gestural-visual languages

	VOCAL-AUDITORY	VISUAL-GESTURAL
Language production	Built on sounds: production of audible speech (source of sound internal to speaker).	Built on gestures: production of visible signing (source of light external to signer).
Phonological organization	Linearity is more explored (the auditory system forces words to be sequentially organized).	Simultaneity is a main feature (the capacities of the visual system effectively contribute to simultaneity).
Medium (channels through which a language is conveyed)	The medium for speech is fundamentally one-dimensional (speech plays out over **time**).	The medium for signing is multidimensional (the articulatory and perceptual characteristics give signed languages access to dimensions of **space and time**).

The visual-gestural modality has effects on language itself but also impacts translational and interpretative processes involving sign languages (Padden 2000, Quadros, Souza 2008, Rodrigues 2013, Segala, Quadros 2015). The characteristics of *intra*modal translation and interpreting[1] performed between two vocal-auditory languages (i.e., without involving a signed language) are shared by *inter*modal translation and interpreting between a spoken and a signed language. According to Rodrigues, the only difference between intramodal and intermodal processes "[...] is, perhaps, that *sign language translators and interpreters work across modalities*, which leads to certain implications for the translating or interpreting performance [...]" (2013, 44; my translation, emphasis added).

It is noteworthy that intermodal interpreting is still more common than intermodal translation. The fact that interpreting stands out over translating in the case of signed languages is a result of several factors, including, for example: (1) the recency of signed languages which still do not have a circulating and consolidated system of writing, and (2) the high demand for access to education and to other public services by the deaf people.

There are certain translations involving sign language that do not focus on a written system. Rather, they use the 'natural production' of language (the language being uttered, in flux). According to Wurm, "due to the ability to work with fixed STs [source texts] and record and re-record TTs [target texts] with potentially unrestricted time and in the absence of the primary participants, the notion of sign language translation is gaining prominence" (2010, 20).

Considering that the only support for sign languages in their 'natural production' (visual performance) involves video recording, the basic definition of translation as a process involving only written texts should be broadened in an effort to incorporate this specificity of gestural languages. Therefore, the definition of translation

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[1] Intramodal translation and interpreting can also involve two signed languages. Intramodal visual-gestural processes differ from intramodal auditory-vocal processes. For example, while the interpretative processes in spoken languages require hearing and vocal abilities, signed languages require visual and corporeal skills for a visual-gestural language production.

should refer to texts as *recorded* (registered texts), instead of only written. This would lead to a better fit of different kinds of texts such as written, audio and video (texts) in the definition.

As mentioned previously, translating and interpreting processes are not distinguished solely by the type of text (oral or written), given that there are several other aspects to be considered. The comparison of the different characteristics within these processes leads to a better comprehension and analysis of the way intermodal translation and interpreting take place.

Table 3 Features of intermodal translation and interpretin

INTERMODAL TRANSLATION	INTERMODAL INTERPRETING
Activity less common than interpreting that has gradually gained more space and prominence, mainly in the academic environment.	Very common activity and is mainly responsible for the visibility of sign languages in Translation and Interpreting Studies.
Materials translated to / from sign languages frequently present the target text side by side to the source text (often in sign language, written texts, dubbing, some type of voice-over etc.).	The target text is often presented to the public without the use of booths or technological equipment (except in large events in which the interpreter is projected into big screens and booths for when the final product is in a spoken language).
Since sign languages do not have a consolidated and socially disseminated writing system, video recordings of its 'signed version' are used in several translation processes, making the translator visible.	Since sign languages are visual-gestural, the interpreter is always visible to the audience.

As the table above (Table 3) indicates, despite sharing some features with the intramodal translation and interpreting processes, the intermodal translation and interpreting involve certain specificities caused by the effects of language modality. There are various types of effects, such as the professional's body becoming the language that is transmitted to the audience.

Consequently, the intermodal interpreters and even intermodal translators may become the center of attention when the target text is in a signed language.

The final products of intermodal translation can be put into two categories. The first one involves having a written target text, previously produced and automatically recorded (i.e., the translation process consists of the technology that materializes the written text and that places it on a support). The second category involves having a video or audio recording as the target text, also previously produced, but that is not automatically recorded (i.e., the translation process demands the use of external technology to record the audio or video, materializing the text).

Table 4 Types of Written and Unwritten intermodal translation

INTERMODAL TRANSLATION (WRITTEN)	INTERMODAL TRANSLATION (UNWRITTEN)
$SL_{written}$ ➔ $SPL_{written}$ (from SW/ELiS/SEL into Text-PTw) $SL_{video-'signed'}$ ➔ $SPL_{written}$ (from video-Libras into Text-PTw, Subtitles) $SPL_{written}$ ➔ $SL_{written}$ (from Text-PTw into SW/ELiS/SEL) $SPL_{audio/video-oral}$ ➔ $SL_{written}$ (from Video/audio-PTs into SW/ELiS/SEL)	$SL_{video-'signed'}$ ➔ $SPL_{audio/video-oral}$ (from video-Libras into Text-PTs, Dubbing, voice-over) $SPL_{audio/video-oral}$ ➔ $SL_{video-'signed'}$ (from video/audio PTs into Video-Libras, 'Subtitles' in Libras)

SL – signed language; SPL – spoken language; SW – SignWriting; ELiS – *Escrita de Línguas de Sinais* (Sign Language Writing); SEL – *Sistema de Escrita para Libras* (Writing System for Libras); Libras – Brazilian Sign Language; PTs – spoken Portuguese; PTw – written Portuguese.

Note: The word 'signed' above refers to language in flux, being uttered.

As mentioned before, signed languages do not have a commonly used and spread writing system. However, some proposals are circulating albeit in a restricted way. Nevertheless, some translations from spoken languages into sign language writing systems (and vice versa) can already be found. In addition to the writing system for

sign languages known as SignWriting and developed by the North American researcher Valerie Sutton in the 1970s, there are other systems that propose a written form of sign languages. In Brazil, there is a writing system for sign languages called ELiS – *Escrita das Línguas de Sinais* (Sign Language Writing)[2] and another called SEL – *Sistema de Escrita para Libras* (Writing System for Libras)[3]. Despite being incipient, these proposals demonstrate the possibility of an intermodal translation between the written forms of a spoken and a signed language.

Furthermore, in addition to translation that involves a written form of signed languages, namely *written translation*, we may also find a kind that does not involve any writing systems – *unwritten translation*. In the latter, while maintaining the formal characteristics of a translation process, there is, on one side a signed text recorded on video and, on the other side, an audio recorded in the spoken language (it would be something close to dubbing or voice-over).

Organizing the intermodal interpretative process is somewhat less complex than classifying the intermodal translation process presented above in Table 4. If we consider the characteristics of the product, we can classify intermodal interpreting into two categories, as can be seen in the table below (Table 5).

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[2] Based on Stokoe's notation system (1965), ELiS was released in 1997 and since then has received several names and undergone several transformations. It is a system of linear writing, from left to right, which writes the minimum units of signs – the *quirografemas* (letters) that make up the *quirogramas* (words) (Barros 2008).

[3] SEL can represent a three-dimensional language such as Libras in a linear way and aims to be functional. It is being developed by a group of researchers from the State University of the Southwest of Bahia (Universidade Estadual do Sudoeste da Bahia - UESB) (Lessa-de-Oliveira 2012).

Table 5 Types of intermodal interpreting: vocalizing and signing

INTERMODAL INTERPRETING (VOCALIZING)	INTERMODAL INTERPRETING (SIGNING)
$SL_{\text{'signed'}} \rightarrow SPL_{\text{oral}}$ (from discourse in Libras into discourse in PTs)	$SPL_{\text{oral}} \rightarrow SL_{\text{'signed'}}$ (from discourse in PTs into discourse in Libras)

SL – signed language; SPL – spoken language; PTs – spoken Portuguese; Libras – Brazilian Sign Language
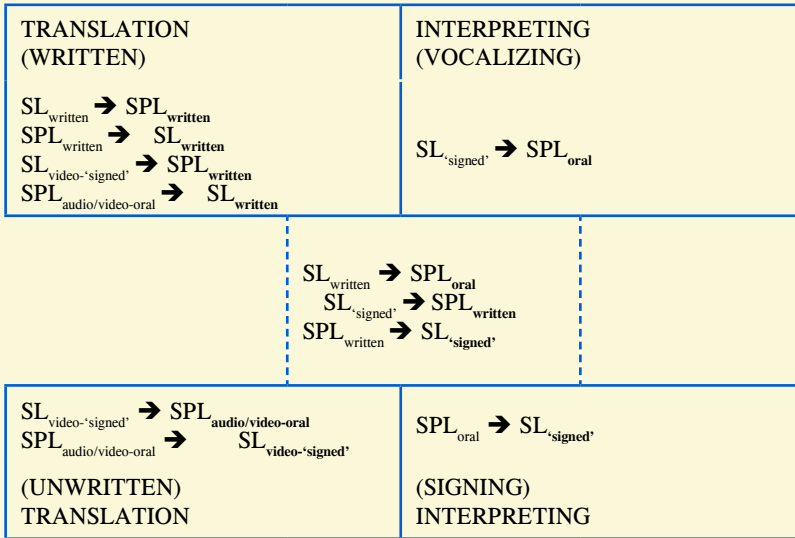
Note: The word 'signed' above refers to language in flux, being uttered.

Table 5 shows that the difference between the interpretative processes relate to directionality: from a visual-gestural language into a vocal-auditory and vice-versa. Directionality interferes in the process[4], since the two very different target modalities (vocal-auditory or visual-gestural) demand specific skills and abilities (Rodrigues 2013). In addition to all the knowledge, skills and strategies required from a good interpreter to vocalize accurately, sign language interpreters must have good visual skills in order to understand what is being signed and a good ability for producing in the oral language. However, when signing, the interpreter must have good listening skills to understand what is being spoken and good visual performance ability for producing in sign language.

These reflections lead to an initial proposal for categorizing translation and interpreting in the case of involving visual-gestural

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[4] Sign language interpreters commonly report that vocalizing is more difficult than signing (For further information see Nicodemus and Emmorey 2013).Perhaps this perception is due to the effect of modality on the interpretative process, since the signs are enriched with grammatical information. Sign languages incorporate the qualities of a referent and require certain specificities on the movement or position of people and objects, or even on the description of size and shape. Thus, it may take longer to interpret and may demand a greater cognitive effort to translate or interpret into a spoken language. The complexity of signed language constructs such as classifiers, often need to be "unpacked". Therefore, the difference in the word and sign production rate and the preponderant linearity of spoken languages as opposed to the simultaneity of signed languages, among other differences intrinsic to the modality, directly affect the directionality of translation or interpreting, especially during simultaneous interpreting.

and vocal-auditory languages. Nevertheless, as in intramodal translation and interpreting, there are processes that combine characteristics of both translation and interpreting. Even unwritten translation is an example of this. Figure 2 provides an overview of the intermodal translation and interpreting processes.

TRANSLATION (WRITTEN)	INTERPRETING (VOCALIZING)
$SL_{written} \rightarrow SPL_{written}$ $SPL_{written} \rightarrow SL_{written}$ $SL_{video\text{-}'signed'} \rightarrow SPL_{written}$ $SPL_{audio/video\text{-}oral} \rightarrow SL_{written}$	$SL_{'signed'} \rightarrow SPL_{oral}$

$$SL_{written} \rightarrow SPL_{oral}$$
$$SL_{'signed'} \rightarrow SPL_{written}$$
$$SPL_{written} \rightarrow SL_{'signed'}$$

| $SL_{video\text{-}'signed'} \rightarrow SPL_{audio/video\text{-}oral}$
$SPL_{audio/video\text{-}oral} \rightarrow SL_{video\text{-}'signed'}$

(UNWRITTEN)
TRANSLATION | $SPL_{oral} \rightarrow SL_{'signed'}$

(SIGNING)
INTERPRETING |

SL – signed language; SPL – spoken language.
Note: The word 'signed' above refers to language in flux, being uttered.

Figure 2 Overview of the intermodal translation and interpreting processes.

When considering a possible typology for sign language interpreting, Pires Pereira's (2015) proposal involved naming forms of translation according to the modalities involved. In doing so, she begins with the process that has a signed language as source and a written form of a spoken language as target. This process was considered an *intermediate*, since it blends characteristics of translation and interpreting, in this case the signing (the most common one used for interpreting) and the

written form of a spoken language (the most common one used for translation). According to the author,

> […] in cases where the result is a transcription-translation, there are practically no studies available, from the perspective of Translation or Interpreting Studies, about this form of translation that is unusual in spoken languages, except for the note-taking that spoken language interpreters do. In signed languages it is common and extensive when, for example, a person is signing in Libras and asks the signed language interpreter to write directly in Brazilian Portuguese. It is a type of inverse sight translation that does not have a single, standardized denomination. (Pires Pereira 2015, 53-54; my translation).

We are in line with Pires Pereira (2015) and we also understand that these intermediate processes resemble 'sight translation or sight interpreting'. Broadening such definition, the process of immediately offering a written product from a signed source can also be considered a form of sight translation (from SL_{signed} into $SPL_{written}$) with an enduring target text automatically recorded by writing. In some cases, this form of translation or interpreting is even used by bilinguals to promptly write the speech that is being held in sign language.

Similarly, the process of instantly offering a product in a spoken language based on a written form of a signed language can be considered a mode of sight interpreting (from $SL_{written}$ into SPL_{oral}), as in spoken languages, since the final product is ephemeral and unwritten. This type of interpreting can be used as a way of making texts produced in a writing system of sign language accessible to more people. Finally, there is also the process of immediately offering a signed final product based on written Portuguese (that becomes available little by little as the oral discourse proceeds), which is an incipient mode of *sight interpreting* used (from $SPL_{written}$ into $SL_{'signed'}$), for example, by deaf people when interpreting in

events (i.e., the oral text appears to them in a written form because of the work of a stenotypists).

Final considerations

The reflections made in this paper sought to establish the differences between translation and interpreting. Based on these distinctions, considerations were made about the processes of translation and interpreting that take place between languages of different modalities: visual-gestural and vocal-auditory languages. Besides being interlinguistic, these processes are intermodal and constitute a specific phenomenon substantially different from processes that involve languages of the same modality.

Translation and interpreting between a spoken and a signed language are marked by different effects of modality on the interlinguistic translation process, which has significant implications for the performance of sign language translators and interpreters. Additionally, regarding intermodal translation, we have observed that there are some specificities related to its operationalization, since signed languages recorded on video are commonly employed as the final product of the translation of written or oral texts produced in spoken languages. Moreover, the translation of sign languages has been increasing significantly nowadays, especially within the academic environment, with its different directions and possibilities (Wurm 2010, Rodrigues, Beer 2015, Rigo 2015).

The effects of modality are related, for example, to the different properties of signed language articulators and, in turn, to their visual perception which enables a broader use of simultaneity and other special linguistic devices specific to signed languages. Considering the importance of *intermodality* to the processes of translation and interpreting involving sign languages, more studies should be held in order to better understand it. The matter should be approached not only by translators and interpreters but also by

those who train these professionals, as well as researchers in the field of Sign Language Translation and Interpreting Studies.

We conclude that the work on modality and its effects on sign languages, as well as the work on the processes of translation and interpreting, must be conceived as one of the elements of translation competence necessary to intermodal translators and interpreters. Thus, in the training of these professionals, the different demands and specificities of the intermodal translation process, as opposed to the intermodal interpreting process, should be addressed in order to offer the necessary tools for improving conscious reflection about this type of activity's impact. Furthermore, it will contribute to a conscious and meta-cognitive process able to guide decision-making and lead to a profitable use of translation and interpreting strategies.

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