Abstract concepts: Libras/Portuguese translation and interpretation[*]

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Abstract

The aim of the study is to identify the cognitive-linguistic processes in the translation activities from Portuguese to Libras by translators-interpreters; and from this to the comprehension expressed initially in Libras and, thereafter, in written Portuguese by deaf individuals. This translation process uses micro-texts, which specially designed for this purpose and sufficiently contextualized to ensure pragmatic consistency. This research intended to raise hypotheses and empirical evidences that lead to the improvement of the Libras translator-interpreters' competence, in the comprehension processes and in elaborating constructions that express abstract concepts which have lexical/grammatical correspondents in Portuguese, but not necessarily in Libras. Research findings reinforce the need for continued improvements of such professionals, and advises them on the problems of interpretation and translation of abstract concepts/as well.

Keywords

Abstract concepts; Libras; translation; translators-interpreters; polyssemy

Resumo

O objetivo do estudo é investigar os processos cognitivo-linguísticos nas atividades de tradução do português para Libras pelos tradutores-intérpretes; desta para a compreensão expressa inicialmente em Libras pelos sujeitos surdo; e, em seguida, em português escrito pelos indivíduos surdos. Esse processo de tradução faz uso de microtextos especialmente projetados para esse propósito e suficientemente contextualizados para assegurar consistência pragmática. Esta pesquisa visa levantar hipóteses e evidências empíricas que levem ao aperfeiçoamento da competência dos tradutores intérpretes de Libras nos processos de compreensão e na elaboração de construções que expressem conceitos abstratos, os quais possuem correspondentes lexicais/gramáticais em português, mas não necessariamente em Libras. Os achados da pesquisa reforçam a necessidade de aperfeiçoamento continuado de tais profissionais e também os alerta sobre os problemas de interpretação e tradução de conceitos abstratos.

Palavras-chave

Conceitos abstratos; Libras; tradução; tradutores-intérpretes; polissemia

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1. Introduction

The proposal seeks to analyze the process of interpreting-translation of abstract concepts of the Portuguese language and Libras, by SLTI[1], Libras to Libras and Libras to Portuguese (PL) written by deaf subjects.

The objective of this research is to analyze the lexical and semantic particularities of the abstract concepts of the PL in the translating processes of sign language (SL). The empirical research was done under controlled conditions, involving individuals coming from Rio Grande do Sul (RS). The participants were six interpreters-translators, some graduates and others graduating students, who work with academic deaf college students of higher education. The survey process entails: identifying the cognitive processes mediated through the SL interpreter translator action; transcribing the SL to the PL, using the ELAN software; verifying through linguistic-cognitive analysis the necessary skills for the bilingual translation (used by the interpreter-translator of SL and PL); examining the arrangements of the regional translational act practice in the mediating of the SL interpreter; identifying interlinguistic aspects of the SL and PL interpreter-translators intervening action, as well as the interpretation presented in Libras by the deaf subject; assessing the pragmatic competence in the understanding and interpretation processes of the communicative intent of the talker, which maintains the logic of his discourse, and the semantics competence drawn from discourse linguistic marks in the talker and the interlocutor speech, as they elaborate constructions which express abstract concepts that have corresponding lexical elements in the Portuguese language, but not necessarily in Libras.

This research can be characterized as an empirical study in a controlled environment at the same time it takes advantage of what the theoretical and applied literature makes available on the linguistic and cognitive aspects (of language in use) of such communication system. For the transcription and analysis of the obtained in the proceedings *corpus* we will use ELAN – Language Annotator Eudico – which is a software of video and audio SL transcription highlighting trails and glosses with an emphasis on lexical particularities of the abstract concepts of semantics, when translating and interpretating Libras.

This analysis aims answering the following questions: (1) How are the abstract concepts translated to Libras? (2) How do the choices made when interpreting and translating abstract concepts can affect the interpretation of the deaf individual? Of the responses (1) and (2) what skills and abilities SLTI need to develop to ensure more efficiency in their activities?

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[1] SLTI – Sign Language of Translator-interpreter

2. Sign Language and Brazilian Sign Language

Sign(ed) languages are natural languages or a language with structural and functional similarities with any natural language. Natural languages are multimodal by using the aural-auditory modality and the visual-gestural modality. Sign languages are multimodal by using the signing space, visual-manual modality and non-manual markers, such as facial expressions.

For the longest time in Linguistics it was believed that the signs were just mimics, pantomimes and/or isolated gestures. According to Quadros (1997), sign languages are used by deaf communities around the world and they show the same characteristics as oral languages. However, sign languages are captured through visual experiences of deaf the people and therefore, in this respect, they become distinct oral languages. The author says:

> Sign languages are linguistic systems passed down from generation after generation of deaf people. They are languages that are not derived from oral languages, but flowed from a natural communication need of people who do not use the oral-auditory channel, but the space-visual channel as a linguistic modality. (QUADROS, 1997, p.47). [2]

Fernandes (2007), when defining the space-visual languages and differentiating them from the auditory-oral language, states that:

> The languages are denominated oral-auditory when the form of not spelled reception is the oralization. On the other hand, they are visual space when the reception is done through the sense of sight. In both cases, even when the channels of reception are different, they fulfill the function of enabling communication and interaction among members of a cultural group. The language to be utilized - orally-auditory or visual-spatial - is adequate for the case of communication between deaf and hearing individuals, respectively, because it will reach the linguistic reception channels will be reached in each individual specific to each individual, in their cultural context. (2003, p. 17).

For the proposed study, aspects of Signs Language and its structure are examined. According to Quadros (1997, p.119), "the sign language involves movements that may seem meaningless to many", but for the deaf subjects "they mean the possibility of to organize ideas, organize thoughts and to express meaning of life [...]". Thus, the deaf subjects may establish a form of communication through the acquisition of Signs Language. Compared to the oral languages, Signs Language is constituted differently according to their national cultures, allowing the natural construction of cultural identities that deaf communities establish. The researchers have diagnosed "that a sign language is not transparently intelligible by of another monolinguals deaf sign language" (QUADROS; KARNOPP, 2004, p. 32.) meaning that each region has its own culturally constructed language. For example, according to Quadros and Karnopp (2004, p. 32), in Brazil, "the hand sign for NO, despite being considered iconic" can present a meaning of an entirely different sign in Libras, as well as for the American Signs Language

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[2] Translated from the original.

(ASL). This way, the signals NO and WHERE are differentiated by the marking of expressions of negation and interrogation. The hand signal for NO in Brazil has a meaning of negation, whereas the hand sign for NO in the ASL represents a meaning of WHERE, as shown in the pictures below:

Figure 1: Hand signal for the word NO

Figure 2: Hand signal for the word WHERE (ASL)

Source: Quadros and Karnopp (2004, p. 32)

It is known that the SL has a strong influence on of the construction of the deaf identity. Among the members of the community there is the consciousness that the signal shall evoke the idea or represent the cultural meaning in their community. The language bears the mark of the identity of its speakers and represents a crucial element of cohesion in the inter-subjective construction of identity features. In this sense, Libras has a key role in the deaf community as a linguistic community. Thus, there is a range linguistic varieties in Libras. The user of these varieties comprises the meanings of each signal as a way of contextualizing what deaf community expresses in its culture. Alternatively, an official language is one of the linguistic varieties of one nation. According to Heredia (1989) in a linguistic community:

> its members have in common at least one variety of language, as well as standards of correct usage, an intensive communication among them, verbal repertoires linked to roles and standardized by rules, therefore, a symbolical integration within the group or the subgroup of reference. (p. 179)[3]

Those standards constitute a convention system which is represented by "glosses of the Portuguese words in the transcriptions" (QUADROS; KARNOPP, 2004, p 37-8). In the Signs Language transcription system, in some cases, a notation system is used: "when preceded by an asterisk, a sentence or a sign is agrammatical, that is, such representation is not possible to be generated in Sign Language. […]", therefore, it's represented in a simplified way in Libras. The authors emphasize that "the movement, the change of facial expression and the change in direction of gaze" hamper the accuracy of the transcription. For this reason, specific conventions were created for Libras associated with the use of the expressions, settings-hands, movements

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[3] Translated from the original.

and hands orientations in the attempt to identify the sign language gloss that they had similar traits. The sentences construction has its own rules, following mental representations of visual and spatial perceptions, such as, in **PL (Portuguese Language):** "*O menino vai para casa*" (*The boy goes home*) and in **SL (Signs Language):** [*Boy home go*].

The acquisition of a linguistic system supposes the organization / reorganization of all the mental processes of an individual. As stated by Quadros (1997) and Goes (2002), the language constitutes as a fundamental instrument for the human knowledge, and with that men may overcome the limit of sensory experience, individual, and formulate generalizations or categories. You could say that, without language, men will not have formed abstract thinking. The language, in its structured form, presents itself as a conscience formation factor, allowing at least three essential changes to men conscious creativity: being able to duplicate the perceptible world, to assure the process of abstraction and generalization and being a fundamental vehicle for transition and information (BERNARDINO, 2000; BRITO, 1995).

The Signs Language is of natural character for the deaf community, being their first language (L1). Quadros and Karnopp (2004, p. 30) define natural language, "as a legitimate linguistic system and not as a deaf problem or as a linguistic pathology. What the authors state with it is that: "[...] Sign language met all the linguistic criteria for a genuine linguistic language, in the lexicon, syntax and in the ability generates an infinite quantity of sentences." Stokoe (1960, *apud* QUADROS, 1997, p. 84) highlights that:

> LIBRAS is acquired by the Brazilian deaf in a natural way by means of signaling contact, without being taught [...] consequently it should be their first language. The acquisition of this language needs to be assured in order to allow the performance of a systematic work with L2, considering the reality of formal education. The necessity of formal Portuguese language teaching shows that evidence that this language is, *par excellence*, a second language for the deaf individual.[4]

However, the acquisition of the second language (L2) for the deaf community occurs through the contact with a listener user of the PL, and for the listener, Libras is their L2.

3. Abstract concepts in Sign language: contextualization, understanding and translation

Oral and auditory languages are complex in their linguistic and cultural aspects. For Dascal (2006, p. 106-107), talking

> is normally utilized to convey a pragmatic interpretation, and the success in communication is measured by the ability of the recipient to achieve such interpretation. That, when it occurs, is what the term 'understanding' generally encompasses. Note that the understanding is always a pragmatic understanding. This is not just to understand the words of the speaker [...], nor to comprehend such words in their specific reference to the elocution context [...], And yes to reach the speaker's intention when uttering such words in that context.[5]

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[4] Translated from the original.
[5] Translated from the original.

Interpretation consists of finding 'clues' of implicit meanings; of considering the polysemy of lexical items that express abstract concepts and of determining, in each utterance, what those items express according to the linguistic-situational context. Furthermore, there is an individual ability to structure knowledge, a specific ability that to organize cognitive experiences. Bernardino (2000, p. 66) emphasizes that "cognitive linguistics has dedicated itself lately to [...] [a] proper ability of organizing cognitive experiences".

When the Libras and PL interpreter-translator faces the task of signaling abstract concepts, a variety of problems may arise, such as: (a) in certain lexicalized concepts in PL there are no equivalent signs in Libras; and (b) there is to strict dependence on to specific contexts in which SLTI operates such as: juridical, medical, educational and others. Therefore, on a translation, we can find abstract concepts with different interpretations, as is the case of REFLECTING, whose meaning depends on the context of use. In Libras, there is an isolated sign for the verb 'to reflect', according to Figure 3:

Figure 3: Sign for REFLECTING[6]

Source: Machado (2012)

This sign, conducted on this gloss, is part of an specific lexicon, subjected to regional varieties. Consider the utterance (a): "[...] an economic crisis reflected on some market niches [...]". Such a statement, when translated to Libras, is primarily comprehended; then interpreted and only after, the choice for the signal is performed, which it will have the following syntax: (a-Libras) "*problema sério economia **prejudicar** dentro trabalho+ pessoas* ("*serious problem the economy **impair** within work + people*")". In the signaling process, the lexical item 'to impair' is configured this way:

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[6] Figure 3 was supplied by academic João Paulo Ampessan, the academic degree course Letters Libras UFSC. It is noteworthy that the signal configured as Figure 3 can be interpreted, depending on the context, such as: IMAGINE and DREAM.

Figure 4: Sign for PREJUDICAR

Source: Machado (2012)

The particularities of the abstract concept TO REFLECT and its lexical expression in the Portuguese language become evident when (a), provoking a guided translation by a semantic-pragmatic strategy. This is because to the fact that the lexicon of SL has differentiated properties of the oral languages lexicon of vice versa. According to the Sapir-Whorf hypothesis (weak version), accepted by the researchers of Cognitive Linguistics, language influences the way to thinking of a culture (SAPIR, 1958). Therefore, one cannot deny that the way of thinking of a PL user is different from a Libras user, what's more, these cognitive universes remain in constant dialogue in the translating act.

The dactylology usage – "manual spelling [...] direct from Portuguese, is a form of manual representation of the Portuguese orthography, involving a sequence of hand configurations that stand for a sequence of letters written in Portuguese." (QUADROS; KARNOPP, 2004, P. 88) – is mediation resource between those cognitive-linguistic universes. According to Quadros and Karnopp (2004, p. 88), "the non-native lexicon contains words in Portuguese that are spelled manually, and these forms can be considered the lexicon periphery of the Brazilian Sign Language". SLTI spell words in the Portuguese in a variety of contexts, because when terms arise in a technical manner and there is no equivalent signal, a linguistic code is borrowed from the PL. However, in conformity with Bernardino (2000, p. 66), "The problem is explaining how such knowledge [concepts] is integrated to form cognition as a whole." For this reason, SLTI need to understand the concept so that the translation is consolidated. However, in many cases there are no direct translation resources. Hence, the author emphasizes:

> [...] people cannot understand words simply by selecting meanings they hear only meanings selecting from a lexical list [...]. They are to create meaning from information they believe is common between them and the speakers. The understanding of the word, then, can be viewed as a mixture of selection and creation of meanings. In process that is centered in the context, the listeners use the situation and the context of the sentence for understanding what the speaker means. The more information the context provides, the greater the confidence achieved in the construction of meaning. (CLARK, 1992, *apud* BERNARDINO, 2000, p. 66-67). [7]

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[7] Translated from the original.

Understanding the abstract concept in a translation is crucial for the SLTI to perform a contextually adequate translation, avoiding mistaken translations and communication problems arising from it. In the specific case of this research, competencies of understanding, interpreting and translating lexical items from the Portuguese language is emphasized in general, highly polysemic, which express abstract concepts relatively complex, even for users of PL as L1.

4. The Professional Signs Language interpreter-translator: competencies and abilities

To the extent that Libras started being recognized as a language for a fact, the deaf started having social access assurance, through the professional SL – Sign Language/PL – Portuguese Language interpreter-translator. Educational institutions and companies started to ensure access to professional Signs Language interpreter. Quadros states that: "The historical process of this professional occurred from spontaneous activities that were being valued as work activities during the time when the deaf were building their citizenship space." (2002, p. 13).

The skills and abilities that involve the translation as well as the application of theoretical models connected to training of the interpreters translators of Signs Language. This competence is linked to a 'translation process' because, according to Robinson (2002 p. 133.):

> translation is a constant learning cycle that passes through the stages of instinct (indistinct provision), experience (working in the real world) and habit ("readiness for action") and, within experience, through the stages of abduction (conjecture) induction (creating models) and deduction (rules, laws, theories):

The translator-interpreter mediates between the deaf and hearing in different interactions with one or several interlocutors, such as in medical consultations, juridical hearings, procedures or others events that require a communicative mediation, constantly facing new problems and solving in an analytical and conscious manner. (ROBINSON, 2002, p. 133). Even with the growing investment in training Signs Language interpreters from of Signs Language, there remains wide confusion about the interpreter's actual role. Many people still consider the Signs Language interpretation like a charitable service or a simple miming skill. So many others call themselves interpreters without having ever gone through any formal training, which can enable them for the practice of translation for mediation. It is believed to be indispensable for the interpreter to have skills in bilingual translations, but it turns out that not everyone considered bilingual has translation competence, as Albir warns us:

> Although any bilingual speaker has communicative competence in the languages that he or she dominates, not every bilingual owns the translation competence, which is a specialized recognition, integrated by a set of knowledge and abilities, which distinguishes the translator and differentiates him or her from other bilinguals non translators. (2005, p. 19).[8]

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[8] Translated from the original.

Furthermore, the Signs Language interpreter need to be fluent in a particular language system, as he/she needs to translate in real time (simultaneous interpreting) or short lapse of time (consecutive interpretation) a signaled language to an oral language (or vice-versa), or to another signaled language (JAKOBSON, 1969). Thus, according to Pereira and Russo (2008, p. 12), the Libras interpreters:

> need to have their own space, and that their functions are not confused and blended with the functions of the teachers, monitors, auxiliaries or any other. Our work is being linguistic and cultural mediators in different instances, acting as interpreters in conferences, in lectures, seminars, conferences and congener; interpreters accompanying in interviews, bureaucratic procedures, medical and legal advice, translators when the deaf signalize and we have to put it into the written language as well as educational interpreters in educational institutions.[9]

With the growing up searches in the area, we can problematize what we have found in the testimonials published in reference works in the area of deafness, which let on a distrust about the ability of Libras interpreters and Signs Language. We have identified that one of the limitations is the lack of evaluation of the work of Signs Language interpreters. For Sá (1999), there remains a need for more research on to "reliability" in the decisions of the interpreters as it is considered fundamental that the interpreters of Signs Language are able for use by abilities and Signs Language competencies.

In sum, translation competence covers a broad "specialized knowledge" generated by a sum of skills and abilities, "which identifies the translator and distinguishes him from other language speakers and non-translators." (ALBIR, 2005 p. 15).

5. Abstract concepts: Cognitive Linguistics contributions

Concepts design reality according to our experiences. A conceptual category groups a set of entities it represents. According Delbecque (2008):

> the world is not an objective reality *in* and *for* itself. It always appears us in one way or another through our activity which consists in categorizing based on our perception, our knowledge, our state of mind; In summary, from our human condition. That does not mean that reality is thus created to be subjective, since we can reach agreement on our inter-subjective experiences. In effect, living in society means sharing common experiences. (p. 35)[10]

This view is called "experientialist" (cf. LAKOFF, 1987; FELTES, 2007). Concepts such as FRUIT, DESK, BOOK involve categorization processes that are the result of the interaction of our perception, socio-cultural and situational knowledge (of usage). Although they seem less problematic, they imply in their construal and usage in a series of cognitive operations and agreements with the speech community. Other concepts, like VIOLENCE, FREEDOM, LOVE, LIFE, JUSTICE (cf. FELTES, 2007) are more complex in their construction and applications in speech

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[9] Translated from the original.
[10] Translated from the original.

contexts, because they are affected by the nature of social institutions, juridical, religious among others, which vary greatly from culture to culture and from subculture for subculture in the same community. They are considered as abstract as they involve more operation of abstraction, in which beliefs and values introduce greater variation, but also more negotiations of meaning in speech events.

According to the proposal of the Theory of Idealized Cognitive Models – TMC (LAKOFF, 1987), concepts and categories have their structure motivated by cognitive and cultural models. These are constructs that organize the thinking through the human and cultural relations, because we have the body that do and we interact in the world in order to sharing certain experiences. As constructs, they are idealized because they do not "account for" the world as an objective way are relatively stable, but are subjected to variation depending on the dynamics of socio-cultural relations which are historically determined.

The conceptual categories, in turn, as they register themselves in the language, they become linguistic categories, so that, according Delbecque (2008):

> the community "translates them" into linguistic signs. A more comprehensive view of language as a system of signs goes beyond the type of connection between the form and meaning of a linguistic sign. This is then connected to the human "conceptualizer" and to the world that belongs to it, that is, just as he lives in it. The conceptualizer, the conceptual categories and linguistic signs are linked together (p. 35).[11]

This interlinking is more complex when examining abstract concepts, even more so when linguistic systems are put in contact, by translating processes. This is because the linguistic categories of a system and are affected by the processes of conceptualization/categorization cognitive and socio-culturally oriented, and also by the Sapir-Whorf hypothesis, language systems affect the way that the "world" is organized, we must highlight the negotiations that take place when subjects who have Libras as L1 are introduced into a universe of meanings that come from the PL, reorganizing them in accordance with the conceptual and linguistic categories of that L1.

According to experientialist semantics, which is the foundation of TMCI: "Meaning is not a thing, it involves what is meaningful to us. Nothing is meaningful in itself. Meaningfulness derives from the experience of functioning as being of a certain sort in an environment of a certain sort" (LAKOFF, 1987, p. 292). In the studies about the meaning, there is the phenomenon of polysemy: a lexical item can have several meanings. According to Feltes (2007, p. 182-183):

> The senses are multiplied because the mind builds on experience, in an experience with others, a constructed by the memory of these experiences or the sense of the interactions that have generated these senses, which turned the experience and that, in one way or another, to different degrees of consistency, oriented our inner life and our ways of living.[12]

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[11] Translated from the original.
[12] Translated from the original.

Silva (2006) clarifies that "[the] polysemy typical phenomenon, the main the structuring of semasiological dimension of the words, that is, the dimension that comes from the formal component of words, in Saussure's terms, from the signifier to the senses and referents that could be associated with this form and thus to this word or lexical item". However, the author argues that:

> in the inverse dimension, the onomasiological one, that comes from the concept, meaning or referent to different forms and therefore to different words or lexical items that may designate or name things, other types of structuring are in operation, such as lexical field, the hierarchy lexical relations of synonymy, antonymy, hyponymy. The polysemy is a paramount semasiological phenomenon, being the synonym the onomasiological inverse and the most direct, and lexical field the taxonomy and the frame (FILLMORE 1977, 1985) the most relevant onomasiological structures. (p. 26).

For Taylor (2002, p. 471) "a language without polysemy would be useful only in a world without variation or innovation, where the speakers wouldn't have to respond to new experiences nor to find symbols for new conceptualizations." Thus, the author emphasizes CL as one of the fields that study polysemy, in order to find in the most general levels or of abstraction, the senses of polysemic occurrences that represents the mind of the subject in the use of linguistic expressions. According to Silva (2006):

> The polysemy is the focus of attention also in many studies of cognitive semanticists on metaphor and conceptual metonymy, conceptual integration ("blending"), prototypes, semantic frames ("frames"), networks ("networks") semantics. The reasons for the interest in polysemy are contrary to the ones that, as we saw in the previous section, have led structuralists and generativists to demean polysemy. And on the other hand, are mistaken for some of the very fundamental principles of Cognitive Linguistics. (p. 55)[13]

Silva summarizes the approach of CL / Cognitive Semantics for the polysemy as related to the *prototypical* categorization, with different degrees of mental representations between the *intuitive* and a*nalytical* conceptualizations. It is built a *network* of meanings that are interlinked by different types of relationships.

6. Method and procedures

The research is characterized as an empirical study by means of an experiment under controlled conditions, approved by the Research Ethics Committee. As it is about testing translation methods, but checking what resources are exploited in the translation process by proficient translators-interpreters (**SLTI**), of texts originally produced in Portuguese Language (**PL**) into the system of Libras (**SL**) in a situation of communication with the deaf, we don't use control group and experimental group, nor the pre and post-test steps. The steps of the empirical procedure are the following:

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[13] Translated from the original.

(1) **Development of pragmatically contextualized texts:** it involved the construction of a set of contextualized texts with minimal, necessary and sufficient conditions for them to be understood by the SLTI, having this text interpreted and then, having it translated into LS. In its lexical-semantic constitution there are abstract concepts (in polysemic network) that had, PL, an established lexeme. The sense of each lexeme varies in immediate linguistic context. The concepts of AUTONOMY/AUTONOMIA ('autonomy'/ 'autonomia') were the chosen ones for this experiment. In this paper, we present only partial analysis for the micro-text with the abstract concept AUTONOMY/AUTONOMIA:

Table 1 – Abstract concepts of Autonomy (micro-text)

| Microtext for the abstract concepts of **AUTONOMY**	Microtexto dos conceitos abstratos de **AUTONOMIA**
The institutions that operate in the private sector carry with AUTONOMY$_1$ the execution of guidelines and norms which relate to external demands. However, the public power operates in the deliberations of legislative, juridical and executive norms that regulate and protect the fundamental interests of society. Thus, the citizen, in his broader and general right of AUTONOMY$_2$ designates with perspective the social and familiar planning. For each school context, there is a need to protect pedagogy of AUTONOMY$_3$, which it is implicated in the ethical and political actions. Such pedagogy is consolidated by the teacher that carries with AUTONOMY$_4$ the many strategies that relate to the theory and practice. In educational opportunity students acted with AUTONOMY$_5$ in different social spaces.	"As instituições que atuam no setor particular exercem com AUTONOMIA$_1$ a execução de diretrizes e normas que se relacionam com as demandas externas. Em contrapartida, o poder público atua nas deliberações de normas legislativas, jurídicas e executivas, que regulamentam e protegem os interesses fundamentais da sociedade. Assim, o cidadão no direito mais amplo e genérico de AUTONOMIA$_2$ designa com perspectiva o planejamento familiar e social. Para cada contexto escolar a necessidade de defender uma pedagogia de AUTONOMIA$_3$ está implicada nas ações éticas e políticas. Tal pedagogia é consolidada pelo professor que exerce com AUTONOMIA$_4$ as inúmeras estratégias que se relacionam entre a teoria e prática. Na oportunidade educacional os alunos atuaram com AUTONOMIA$_5$ nos diferentes espaços sociais."

Source: Machado (2012)

(2) **Selection of the participants of the experiment:** the following participated in the experiment: one groups of Libras translators-interpreters, proficient, undergraduates or graduates in higher academic level, qualified under the legislation 5.626 from December 20th, 2005, The deaf subjects, six in number, have as L1 Libras and as L2, PL (written modality) and come from the Rio Grande do Sul region, just as the SLTI.

(3) **Leading of the translation procedure:** the procedures were executed in six stages throughout the experiment: **(3.1) First version:** the SLTI and the deaf had no prior knowledge of the micro-text: **(1st)** In the first version, the SLTI performed interpretation of texts elaborated in the syntax of Portuguese language (PL) into the syntax of Portuguese Language

Libras;[14] **(2nd)** The deaf subject at the end of each interpretation, expressed in Libras what was understood of the interpretation from the SLI; **(3rd)** The deaf subject then expressed in the writing modality of the Portuguese Language what was understood from the interpretation. **(3.2) Second version:** the SLTI were given access to the written modality of micro-text: **(4th)** In a second version, the SLTI performed again interpretation of texts elaborated in the syntax of PL into the syntax of PL Libras; **(5th)** The deaf subject at the end of each interpretation, expressed in LS understood what was understood of the interpretation from the Signs Language I; **(6th)** The deaf subject then expressed in the writing modality of the Portuguese Language what was understood from the interpretation.

(4) **Registration of the described process in (3.1 and 3.2):** the experiment was video with three digital cameras, being: the first one angled directly toward the deaf; the other, with an angle directly toward the SLTI, and the third one was left simultaneously capturing the image of the interlocutors, as the simulation illustrated by Figure 5 shows:

Figure 5: Illustration of the procedure from the capture of the image
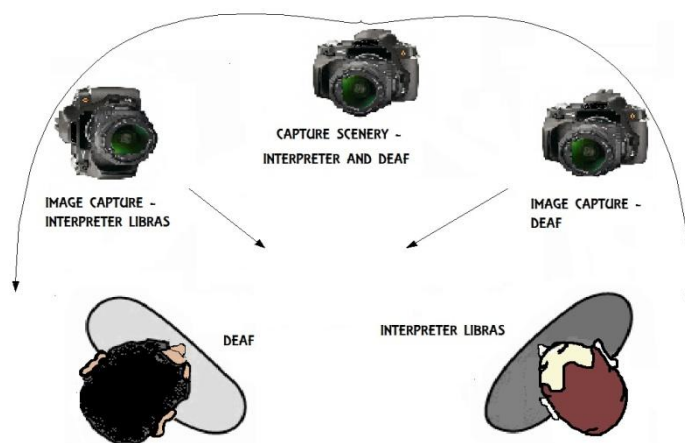

Source: Machado (2012)

(5) **Transcriptions of PL and Libras:** among the available software, we chose for this study the ELAN that allows the "insertion of controlled vocabulary, linguistic types [and] trails of transcription". Figure 6 illustrates the ELAN system for annotations:

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[14] The translation will make use only the linguistic resources that provides to grammar of Libras without the use of techniques employed in oral translation.

Figure 6 – ELAN system for annotations
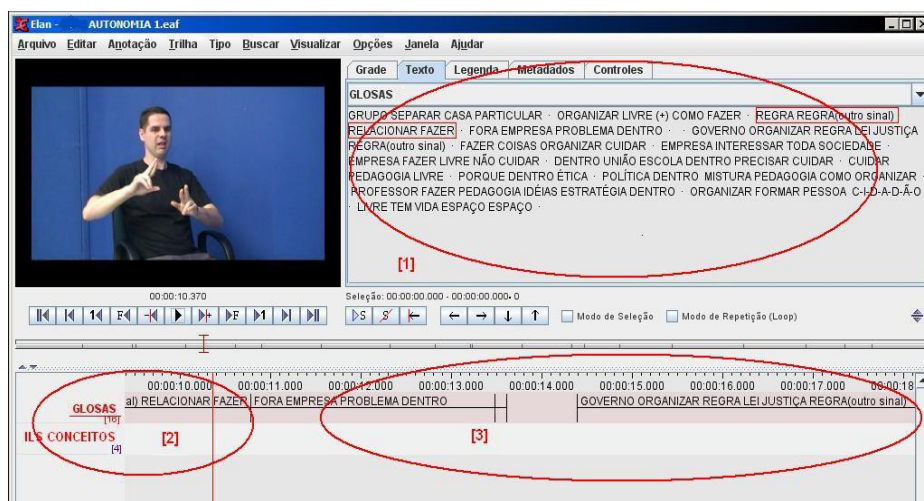
Source: Extracted from ELAN

In data collection performed for the abstract concepts of AUTONOMY/AUTONOMIA by means of annotations on the trails of transcription of the ELAN software and in the vast lexicographical repertoire obtained from dictionaries, we can verify in Figure 6, represented by the number [1], the 'glosses' chosen at the time of interpretation of SLTI. Figure 6 presents the records of the SLTI during the transcriptions on the trails of the ELAN, highlighting the lexematic occurrences of the abstract concepts of AUTONOMY/ AUTONOMIA.

Those annotations allow trails to be generated according to their own annotations and the times of the videos. Thus, "all trails are indicated on the timeline and on the interlinear display, but three of these trails can be additionally indicated on the subtitle of the display (QUADROS; PIZZIO, 2009, p. 25) display. The authors identify a trail as a "set from the annotations that share the same characteristics, for example, a trail that contains the glosses transcription of a reporter, another track that contains the translation of these glosses and so on." In accordance to the authors, the ELAN works on two types of tracks: "independent trails which contain annotations that are directly linked at an interval of time; [and] [...] dependent trails, that contain annotations that are related to the annotation of another track (i.e. annotations of the "mother track")". (QUADROS; PIZZIO, 2009, p. 26).

From the transcription, these steps were performed as follows: **(1st) Libras Transcription**[15]: included in the records selected in each trail – (1) interpretation of glosses, (2)

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[15] The transcripts performed on the trails of the ELAN have followed these steps: [1] synchronize the videos captured with digital cameras in to MPEG1 files with extension for the .eaf extension. (compatible to version 2.6.3 of the transcription system ELAN); [2] use a very low speed to transcribe the interpretations, glosses constituted for logging the video, the movements, facial expressions and not manuals, deictics and anaphoric and processes primarily the choices of lexical items for each specific interpretation from abstract concepts of AUTONOMY.

the occurrences of non-manual expressions and (3) the concepts abstract used in micro-texts. **(2nd) Analysis of the collected data:** from the records, the analysis of the interpretation process of the SLTI and the understanding by the deaf subjects is performed.

7. Overviews of the obtained results

Cognitive Linguistics claims that it is not possible to dissociate the lexical knowledge of world knowledge, and that linguistic knowledge is intricately associated with to the semantic-pragmatic aspects of any natural language, whether it is in the oral modality or gestural. It was identified that, for each abstract concept of AUTONOMY/AUTONOMIA there are several meanings, that is, the meaning depends on the context of the utterance. The words are interpreted in relation to the structured knowledge or the realm of experience. Despite of that, acceptations for lexical item were searched in a dictionary, as a starting point. For 'autonomy' we have:

> **AUTONOMY/**AUTONOMIA$_1$: ("execution of guidelines and standards") = (f.n) **Free:** faculty of ruling their very laws;
> **AUTONOMY/**AUTONOMIA$_2$: ("social and family planning") = (n) **Freedom:** faculty of governing oneself by its own laws; self-government;
> **AUTONOMY/**AUTONOMIA$_3$: ("pedagogy [...] involved in actions") = (n) **Freedom:** teaching how to think right;
> **AUTONOMY/**AUTONOMIA$_4$: ("teacher who exerts [...] strategies") = (n) **Freedom**: achievement that is achieved to the extent that there is a struggle to free oneself, others and the world;
> **AUTONOMY/**AUTONOMIA$_5$: ("students [...] in different social spaces") = (n) **Independence:** faculty that each one has to decide or to act according to their own determination.

Note the fact that, despite of **AUTONOMY/AUTONOMIA$_1$** and **AUTONOMY/AUTONOMIA$_2$** to refer to the idea of FREE, this one applies to "legislation" and "planning", which suggests different abilities and competencies. Likewise, **AUTONOMY/AUTONOMIA$_3$** and **AUTONOMY/AUTONOMIA$_4$** remit to the idea of FREEDOM, but also apply differently to "pedagogy" and "teacher", which also suggests different abilities and competencies.

According to the meanings found in each polysemic item of abstract concepts AUTONOMY (of the micro-text – Table 1), it is observed that there is no fixed meaning of sense for each lexeme. It is possible find many occurrences of polysemic use, allowing Portuguese and Libras translators-interpreters accomplish choices according to their linguistic knowledge and world. To understand the process, annotations from trails glosses of the manual signs are presented, which are constructed for the transcription of PL lexemes (writing).

The transcribed lexemes are productions from the SLTI and Deaf during the interpretative production of Libras, all performed based on the statement of micro-text. Having this record, these transcripts serve as a basis for identifying lexematic / grammatical occurrences in the translation act of the subjects involved, as presented in Table 2, below:

FIRST VERSION OF THE LEXEMÁTICAS OCCURRENCES - NOTATIONS OF LEXEMES - INTERPRETATION AND TRANSLATION OF LIBRAS/PORTUGUESE

GROUPS	AUTONOMIA/AUTONOMY₁ "free choose"			AUTONOMIA/AUTONOMY₂ "free yourself"			AUTONOMIA/AUTONOMY₃ "think sure"			AUTONOMIA/AUTONOMY₄ "free People/individual achieve"			AUTONOMIA/AUTONOMY₅ "direction"		
	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL
A	*	*	*	*	*	*	"free" ef.(sf)	"Free alone"	"free"	"free" IX(si)	*	*	"direction" IX[si]	"path (+)" "different"(+)ef.	*
B	"do+ alone"	*	*	"alone"	*	*	*	*	*	"alone"	*	*	"alone"	*	*
C	"free (+)"	*	*	"free"	*	*	"free"	*	*	*	*	*	"free"	*	*
D	"alone+ do"	*	*	"Free alone +think ef.(ob)"	*	*	"alone"	*	*	"Free alone"	*	*	*	*	*
E	*	*	"freedoms"	*	*	*	*	*	*	*	*	*	*	*	*
F	"free"	"free"	"democracy"	"free+to choose"	"free"	"democracy"	"choose <A-U-T-O-N-O-M-Y>"	"free"	*	"free+to choose"	*	*	"can choose +somewhat different"	*	*

SECOND VERSION OF OCCURRENCES LEXEMÁTICAS

| GRUPOS	AUTONOMIA/AUTONOMY₁ "free choose"			AUTONOMIA/AUTONOMY₂ "free yourself"			AUTONOMIA/AUTONOMY₃ "think sure"			AUTONOMIA/AUTONOMY₄ "free People/individual achieve"			AUTONOMIA/AUTONOMY₅ "direction"		
	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL	SLTI	DEAF-SL	DEAF-PL
A	*	*	*	*	*	*	"free"	"free"	"free"	"several directions"	"Desire choose future path"	*	"free" "different+ directions"	*	*
B	"alone"	*	*	*	*	*	"free" "free" "alone"	"alone"	"autonomy"	*	*	*	*	*	*
C	"free"	*	*	*	*	*	"<A-U-T-O-N-O-M-Y>"	*	*	"think + organize"	*	*	" free +think"	*	*
D	"free+do"	*	*	"free"	*	*	"free"	*	*	*	*	*	"free"	*	*
E	"have (++) power"	*	*	*	*	*	"power"	*	"freedoms"	"power"	*	"freedoms"	*	*	"freedoms"
F	"choose+ free"	"choose+ rule+free"	*	*	"free+ choose"	"democracy"	"free choose <A-U-T-O-N-O-M-Y>"	"law+ free"	*	"free+ choose"	"student can do free"	*	"free+ chooser"	"free"	*

Table 2 - First release of the interpretation and translation of abstract concepts of AUTONOMY in Libras/Portuguese: analytical comparison between SLTI/Deaf-SL/Deaf-PL (written) (*) not stated/expressed - there was no registry elaborated. Source: Prepared by authors

Those translation choices, from the interpretation of the micro-text of each SLTI, are registered in each moment for interpretation (first and second versions). The choices of the translation are registered from the interpretation of each micro-text for each SLTI in each step (1st and 2nd versions), as the result of the interpretation of deaf subject, expressed in Libras.

After having done the analysis from abstract concepts for **AUTONOMY/AUTONOMIA**, Graphic 1 is presented, which summarizes the data of the second version interpreted and translated by the SLTI and deaf in Libras, for the Portuguese translation in the written modality.

Graphic 1: **Summary of the data from the first and second interpreted versions – SLTI**
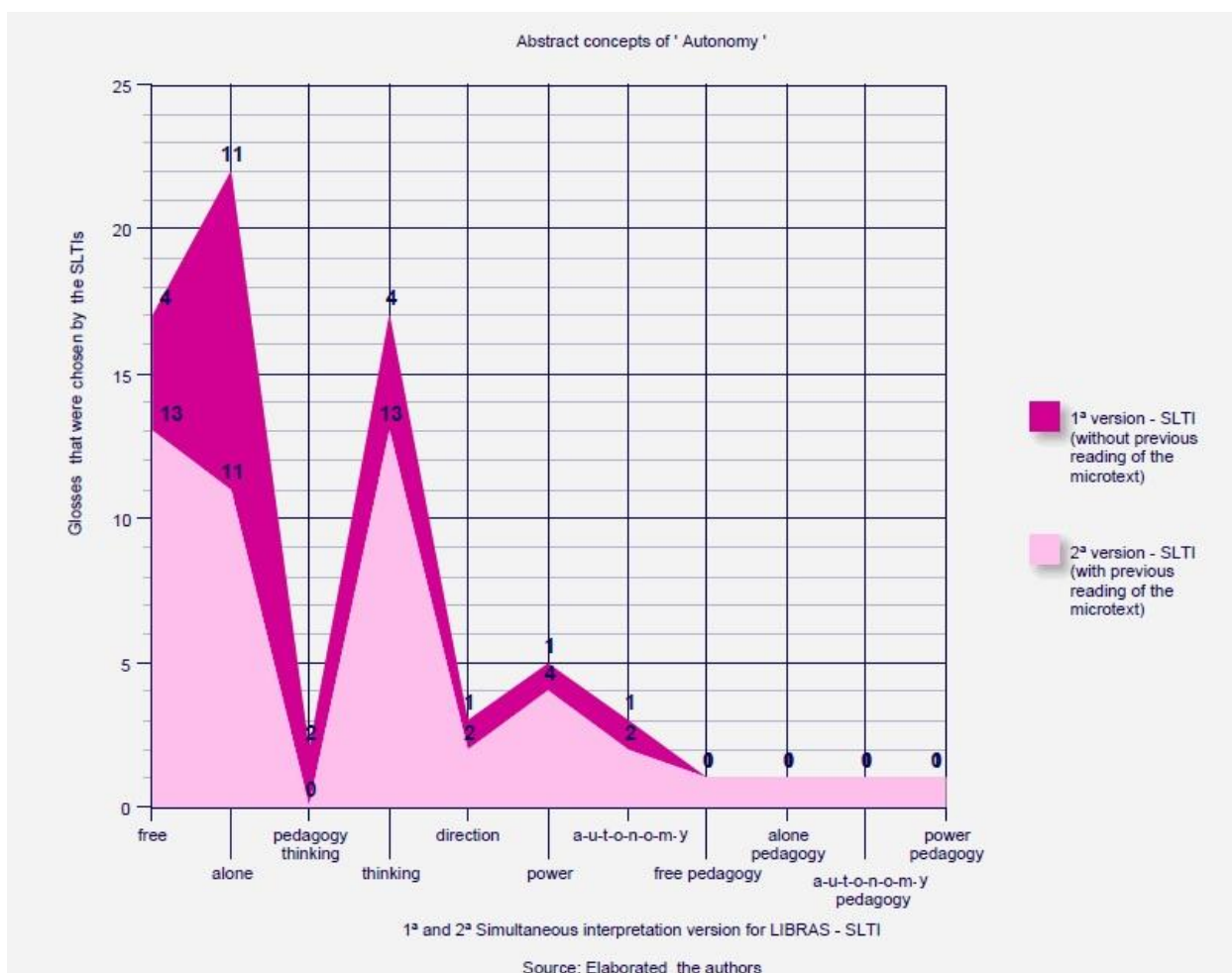
Source: Elaborated by the author

It is verified that abstract concepts are indeed problematic for both SLTI as for the Deaf subjects, given the variety of signaled and written lexematic constructions to the lexical items of 'autonomy', while choices for the polysemous items. The SLTI seek

to find synonyms or paraphrases so that the meaning of 'autonomy' in PL is understandable by the Deaf in Libras. Those choices sometimes are adjusted, at some degree, to the contextual meaning and sometimes distance themselves, in each version. However, for the Deaf, the expression of understanding still proves itself to be highly complex due to factors yet to be investigated. For Cognitive Linguistics language is comprised through a set of perspectives of theoretical and methodological analysis.

When comparing to first and second versions, it is observed the existence of manual lexemes and written variables to express the different abstract concepts for **AUTONOMY/AUTONOMIA**. It is also observed that in the opportunity to allow SLTI to accomplish the reading of micro-text in the written modality in the PL, SLTI make other lexical choices.

The meaning of words is subordinated to mental frames, and, thus, the interpretation of an abstract concept lexical item requires access to the structures of knowledge that relate to elements and entities associated with scenes of the human experience, considering how physical and cultural bases the cognitive processes. It is possible to compare the results of the first version to the second version. It is presented, hereafter, the analysis of lexematic construction, registered in comparative analysis of the versions. Even on a partial analysis, it appears that abstract concepts are indeed problematic for both SLTI and for deaf people, given the variety of choices for signaling, because they seek to find approximate synonyms or paraphrases so that the meaning of **AUTONOMY/AUTONOMIA** in the PL is likely of understanding on the part of the deaf subject. Those choices sometimes either fit, to some degree, the contextual meaning, and sometimes they distance themselves, in each version. However, for the deaf subject, the expression of understanding still reveals itself highly complex due to factors yet to be investigated.

8. Concluding Remarks

The research that is the object of this paper certainly contributes to fundamental aspects of translation competence, specifically in the particularities of translation-interpretation of abstract concepts, whose expression in Portuguese and in Libras are as varied and as complex, given the language differences in lexical and syntactic levels between the two systems.

Therefore the focus is to provide studies for the development and improvement of pragmatic competence of Libras translators-interpreters, in the process of

understanding and interpretation that has communicative intent of the speaker, in which remained the logic of the utterance from the linguistic marks in the discourse, when preparing lexematic and grammatical constructions that express abstract concepts that have formal and functional equivalence categories between expressions for the languages of gestural and auditory modality. The SLTI function goes far beyond the mere act of gesturing pointing the concrete. It is noticed that the SLTI takes on the figure of situational mediator. The question of interpretation can be problematic in an individual text, because it makes possible the use of a set of signs and grammatical constructions that are likely to be used by the SLTI in their authorship in translating and/ or interpreting.

Thus, it is from an experimental strain that this practice operates in a way that seeks not only the manifestation and the construction of a manual lexeme, but also the creation of cultural significance of understanding, by the search for the meaning of the utterance, which is "contained" in the expressions mediated symbolically. Thus, it is on the interpretive act that we find of movement of senses, which is implicit in the construction of meanings semantic-pragmatic. This study will certainly contribute to fundamental aspects of the translation competence, specifically in the particularities of translation-interpretation of abstract concepts, whose expression in Portuguese and in Libras are as varied as complex, given the language differences in lexical and syntactic levels between the two systems.

The evaluation of the results obtained in this study takes into account the fact that experimental environments, even if they simulate realistic situations, are artificial, because they follow a protocol of controlled procedures, unlike spontaneous situations. Although the subjects had been prepared for the experiment, the design of the environment, with three synchronized video cameras, at a fixed position, which prevents spontaneous movements from typical interactions of natural face to face communication and improvisation, influenced the behavior of participants, promoting embarrassment, "blockages" in their ability of expression and in their manifestation of their interpretative and translational competence. Consequently, the results, as in any experiment, must be understood under the perspective of data production. Therefore, more research will be needed to obtain more empirical evidence on which there can be raised new hypotheses to guide studies in the Cognitive Linguistics field.

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