Arts, Linguistics, Literature and Language Research Journal

ANALYSIS OF LINGUISTIC VARIATIONS IN SIGN LANGUAGE

Myrna Salerno Monteiro
Professor of Sign language at the Federal University of Rio de Janeiro (UFRJ). Master in Linguistics from the Federal University of Santa Catarina

1

Abstract: This article describes some studies and findings on possible linguistic variations in some signs of the Brazilian Sign Language - Sign language. In order to understand the variations, the article presents a quick study on certain linguistic aspects of Sign language, such as the concept of culture and deaf community, a brief history of sign languages, the first research in Brazil on Sign language, the first phonological parameters proposed for sign language and the parameters that are currently used for the description of Sign language. Both diatopic variations and diastratic variations found in Sign language are presented and analyzed. Variations were found in the signs used in the states of São Paulo and Rio de Janeiro for the color WHITE; at SAD signs, in São Paulo, Rio de Janeiro and Mato Grossodo Sul; at the BUT and GREEN signs in São Paulo, Paraná and Rio de Janeiro; our TRAVEL signs, in São Paulo, Rio de Janeiro and Minas Gerais. All these signs present regional variants at the phonological level. The signs STEALING and SEX, which are variations found in different social strata, are also analyzed, highlighting the most polite way of pointing out certain signs. For analysis of variations, the phonological parameters of each signal are described. The parameters adopted in this study are those proposed by Stokoe in 1960, namely, Hand Configuration (CM), Location (L), Movement (M), together with Hand Orientation (Or) and Non-Manual Expressions (NME) , which were proposed by Battison, in 1974, as a complement to the previous ones.

Keywords: Sign language, Grammar of Sign language, Linguistic Variation of Sign language.

INTRODUCTION

Many researchers have dedicated themselves to the study of sign languages in Brazil and in the world. This makes new discoveries emerge every day for a better understanding and strengthening of the sign languages and culture of the deaf community.

This article describes some articles and findings about possible linguistic variations in Sign language signs in some signs.

Based on works by Stokoe (1960), Ferreira-Brito (1995), Felipe and Monteiro (2008), Quadros and Karnopp (2004), Skliar (1999), Quadros and Karnopp (2004), Skliar (1999), Strobel and Fernandes (1998) aspects related to the culture and structure of Sign language were described.

THEORETICAL BACKGROUND
BRIEF HISTORY ABOUT SIGN LANGUAGE

Sign language, as well as oral languages, is a spontaneous language in the interaction of communication between deaf Brazilians. Like any sign language, Sign language is a visual-gestural language that uses gesture movements and facial expressions, perceived by sight as a channel or means of communication. Therefore, it differs from the Portuguese language, as it uses a different articulatory channel and is perceived by the auditory environment and produced by speech. But the differences are not only in the use of different channels - they are also in the grammatical structures of each language. Before 1980 there were no records proving that the Brazilian Sign Language existed naturally in the linguistic communities of deaf people. Research on Sign language in Brazil has advanced over the years. For example, since 1987, the Federal University of Rio de Janeiro (UFRJ) develops research on Language and Deafness. At this university, research began with Professor Lucinda Ferreira Brito with a view to describing the structure of sign language through the elaboration of a research project (Central Urban Sign Language Brasileiros - LSCB) aiming at the production

of a dictionary analyzing the structure of the language in its phonological, morphological, syntactic, semantic and pragmatic levels (FERREIRA-BRITO, 1995).

In Brazil, urban deaf communities use Sign language, but, in addition to it, there are records of another sign language that is used by the Urubus-Kaapor Indians in the Amazon Forest (FELIPE; MONTEIRO, 2008).

Currently in Brazil, Sign language has been recognized and also taught in teaching, high school and higher education courses, and in speech therapist training courses, as legalized by Decree 5,626/2005.

GRAMMATICAL STRUCTURE OF SIGN LANGUAGE

As a language, the Brazilian Sign Language (Sign language) is composed of all the components relevant to oral languages, such as sign phonology, sometimes also called quirology (which studies signs made with the hands), morphology (deals with the word /sign or lexical item), syntax (study of structures, sentences), semantics (study of meanings) and pragmatics (deals with the use of signs in the transmission of ideas).

The three aspects of signs found by Stokoe, who pioneered research on American Sign Language in the 1960s, were: Hand Configuration (CM), Location (L) and Movement (M). Later, other scholars, such as Battison in 1974 and 1978 (BATTISON apud QUADROS; KARNOPP, 2004), also included Hand Orientation (Or) and Non-Manual Expressions (NME), which are some facial expressions, in the studies of sign phonology.

The Hand Configuration (CM), according to Brito (1995), is understood as the different forms that one or both hands take in the execution of the sign and that are not restricted to the shapes of the hands corresponding to the manual alphabet, that is, to the signs that correspond to the letters of Portuguese.

Ferreira-Brito, according to Langevin, registered 46 MCs, as shown in Table 1. Felipe and Monteiro recorded 64 MCs, as shown in Table 2 below.

The Location (L) or Point of Articulation (PA) is defined as the place in front of the body or in a region of the body where the signals are articulated. The movement (A) is a very complex parameter, which can involve a large number of shapes and directions.

Hand Orientation (OR) is related to palm orientation. It was not considered as a distinct parameter in Stokoe's early work, but was later included by Battison in 1974 (BATTISON apud QUADROS; KARNOPP, 2004). Orientation is the direction in which the palm points in producing the signal.

Non-Manual Expressions (NME) are linked to some facial expressions that have been observed, as they are associated with some signs and are necessary for good sign formation. Facial configurations typical of sign languages such as puffed cheeks, in the GORD@ sign , are a type of non-manual expression.

Producing one of these parameters differently can change the meaning of the signal. We can cite some examples of minimal pairs: SMILE and CHEESE, the same CM and the same L, what differs are the different movements. Another example, APOLOGIZE and BAD LUCK, the same CM and the same M. Locations are different.

The Portuguese sentence structure is conventionalized by the basic structuring of S (Subject) V (Verb) and O (Object). In Sign language, the structure can be SVO or change to OSV or SOV.

Many people may believe that the signs used in Sign language are like drawings of what they represent made with the hands. However, although some signs are, in fact, a representation that has characteristics of the meaning that they intend to express, in
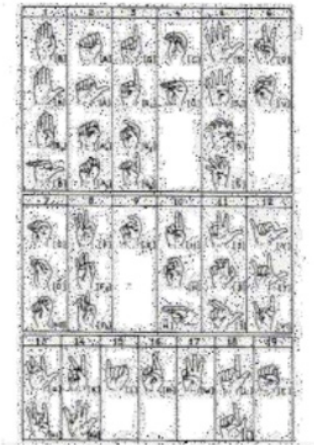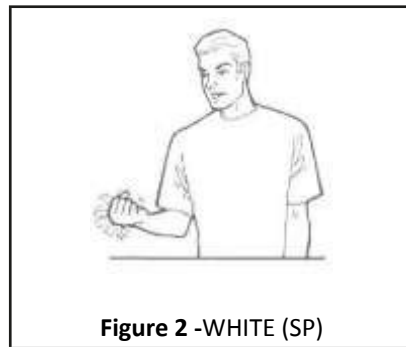
Table 1 - Hand configuration

(FERREIRA-BRITO, 1995, p. 220)

Table 2 - Hand Settings (FELIPE, TANYA,

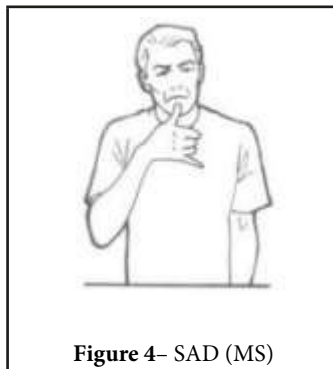Dictionary of Sign Language Version 2.0, 2005)
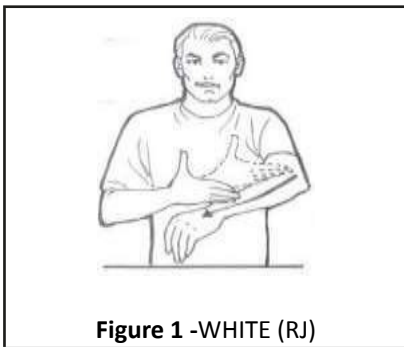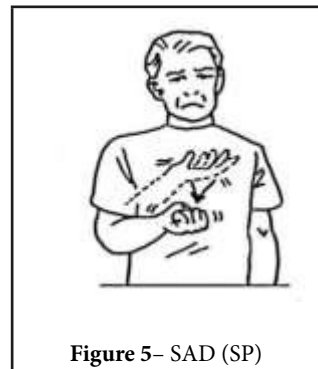

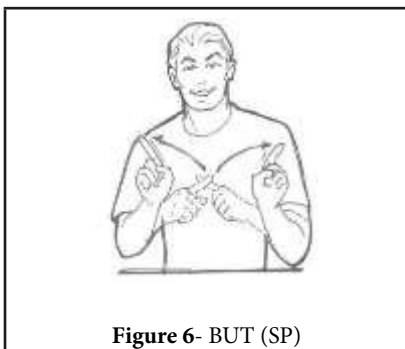**Figure 1 -**WHITE (RJ)

Figure 2 -WHITE (SP)

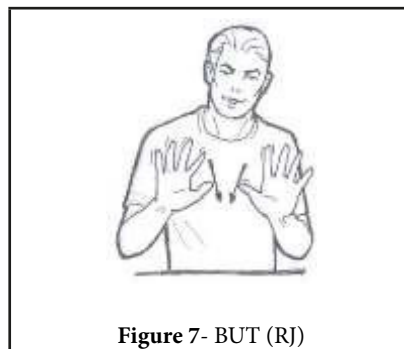
Figure 3- SAD (RJ)

Figure 4– SAD (MS)

Figure 5– SAD (SP)

Figure 6- BUT (SP)

Figure 7- BUT (RJ)

general, the signs of Sign language do not maintain a relationship with their referent. A proof of this is that sign languages in different countries use different signs for the same objects, just as oral languages use different words to express, for example, the concepts of house, book, tree, train, plane.

> A photograph is iconic because it reproduces the image of the referent, that is, the person or thing photographed. So are some signs of SIGN LANGUAGE, gestures that allude to the image of its meaning. This does not mean that iconic signs are the same in all languages. Each society captures different facets of the same referent, represented through its own signs, conventionally. (FERREIRA BRITO, 1993, p. 92)

For example, the following signs are iconic: PHONE, HOME, BALL, CHAIR. Many signs in Sign language are arbitrary, in the sense of not being iconic, and bear no resemblance to the meaning of what they represent. For example, the following arbitrary signs: KNOW, NEED, BILINGUAL, FRIEND@.

LANGUAGE VARIATIONS

Linguistic variations can be regional or social. Diatopic variations are those found in different geographic regions. Diastratic variations are the differences found in different segments of the social structure. Regional dialects occur in geographic regions. Social dialects are those that occur in social groups.

Linguistic variations occur in the lexical system itself: phonological, morphological and syntactic. For example, in Portuguese the following regional variations occur at the lexical level: Mandioca (SP) X Aipim (RJ) X Macaxeira (NE); Pumpkin (Southeast) X Gerimum (NE); Traffic light or Lighthouse (SP) X Signal (RJ). In Portuguese, the following social variations are also found: Problem X Poblema X Ploblema; Flamengo X Framengo. There are also variations in expressions such as: I saw him yesterday X I saw him yesterday;

This is for me to do X This is for me to do; We bought a book X We bought the book; We bought the book.

In this work we present and analyze some diatopic variations and diastratic variations found in Sign language. The selected signs were: color WHITE, SAD, BUT, GREEN and TRAVEL that present regional variants at the phonological level, and the signs STEAL and SEX, which are social variations. Also highlighted was the more polite way of pointing at certain signs.

METHODOLOGY

The linguistic variations presented in this work were observed during a trip to three Brazilian states in 1995, when deaf people from the states of São Paulo and Rio de Janeiro were interviewed. There were a total of 40 deaf people, 20 men and 20 women.

There was a group aged between 20 and 25 years, another group between 26 and 30 years and a third group with people over 30 years. For each group, they were asked to spontaneously produce signals.

The signs selected in this article are part of two studies: monograph by Myrna Monteiro, in 1995, in the Sociolinguistics discipline of the Faculty of Arts of UFRJ, taught by Professor Dr. Emmanuel MSTJ dos Santos in the course of Specialization in Applied Linguistics to Portuguese Teaching, and the book "Linguistic Aspects of Brazilian Sign Language", Fernandes and Strobel (1998) which presents signs found in Paraná.

The variations found in Mato Grosso do Sul and Minas Gerais were observed in Deaf meetings whose author participated.

ANALYSIS OF SIGNS WITH LINGUISTIC VARIATIONS IN SIGN LANGUAGE

To analyze the variations, the phonological parameters of each signal are described.

In Sign language, at the lexical level, the signs for the color WHITE in Rio de Janeiro and for the color WHITE in São Paulo (SP) are different, respectively, presented by the figures 1 and 2.

The parameters for the WHITE signal (RJ) are: CM n° 63; Articulation Point, left forearm; Movement, passing the back of the right fingers over the left forearm starting from the elbow towards the wrist, once.

It is worth mentioning that for the analysis of linguistic variations in Sign language, table 2 proposed by Felipe and Monteiro (2008) was used as a basis for the hand configurations. This sign for the color white, for the Cariocas, can also refer to the color of the skin.

Deaf people from São Paulo use the WHITE sign (SP) for the color white due to the origin of the MILK sign, which has that color.

The parameters for the WHITE Signal (SP) are: CM n°46ª and 02; Articulation Point, neutral space; Movement, right hand in 46th and then in 02, palm tilted upwards, opening and closing. hand slightly, repeating twice.

Another linguistic variation is the SAD sign in Rio de Janeiro, Mato Grosso do Sul and São Paulo, which are represented by figures 3, 4 and 5, respectively.

Figures 1 to 13 made by Tadeu de Souza.

The SAD signal (RJ) and (MS) are similar to each other, but different from the SAD signal in SP. The first and second are similar at the phonological level. Already the sign SAD (SP) highlights more the meaning of "MAGOA" in the chest.

The parameters for the SAD (RJ) signal are: CM n° 39; Articulation point, on the chin; Movement; right hand with thumb tip touching chin with sad expression. The SAD (MS) sign is similar to the SAD (RJ) sign, however, at the phonological level, the hand is turned downwards.

The parameters for the SAD (SP) signal are: CM 46 and 02; Point of Articulation, in the chest; Movement, open right hand, palm up, move slightly down and close the fingers.

(2) The signs, MAS in São Paulo and Rio de Janeiro are represented by figures 6 and 7.

The main difference between the BUT sign (SP) and the BUT sign (RJ) is a pause made at the end of the sign by the deaf in Rio de Janeiro.

The parameters for the BUT (SP) signal are: CM #14; Articulation Point, neutral space; Movement, hands bent down and index fingers crossed. Move your hands to the opposite sides, tilting your head down a little.

The parameters for the signal, BUT (RJ) are: CM #64; Articulation Point, neutral space; Movement, hands open, palms forward. Move your hands slightly forward, tilt your head forward a little and come to a stop.

(3) The signals for GREEN in São Paulo, Rio de Janeiro and Paraná are illustrated in figures 8, 9 and 10.

The signals for GREEN are different in São Paulo, Rio de Janeiro and Paraná.

The parameters for the GREEN signal (SP) are: CM n° 15; Articulation point, on the chin; Movement, right hand with palm to the side, side of the index finger curved touching the chin. Move your hand forward.
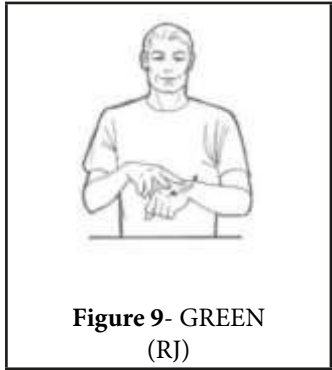
The parameters for the GREEN signal (RJ) are: CM n° 32; Articulation point, dorsum of hand; Movement, right hand in a horizontal V, palm down, fingers pointing to the side. The palm of the right fingers is passed to the left and to the right over the back of the left hand, twice.

The parameters for the GREEN signal (PR) are: CM n° 49 and 48; Articulation point, in front of the nose; Movement, right hand with palm to the side, opening and closing the index and thumb fingers slightly, repeating twice.
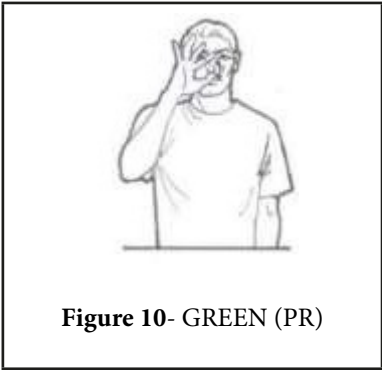
(4) The travel signs in São Paulo, Rio de Janeiro and Minas Gerais are shown in figures 11, 12 and 13.
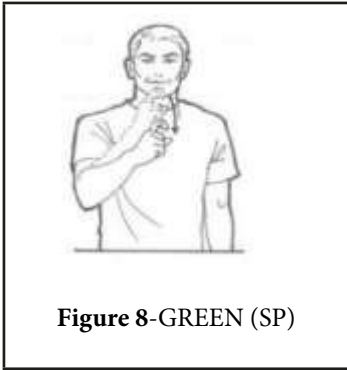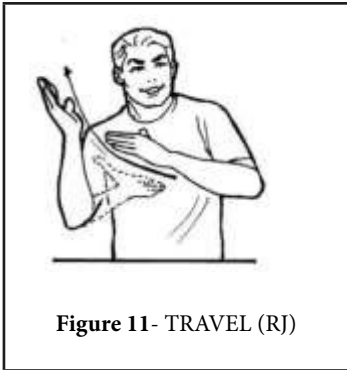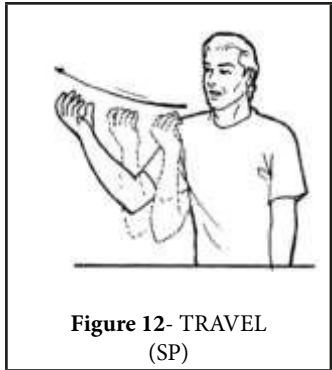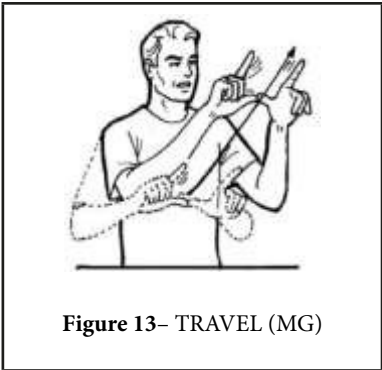
Figure 8-GREEN (SP)

Figure 9- GREEN (RJ)

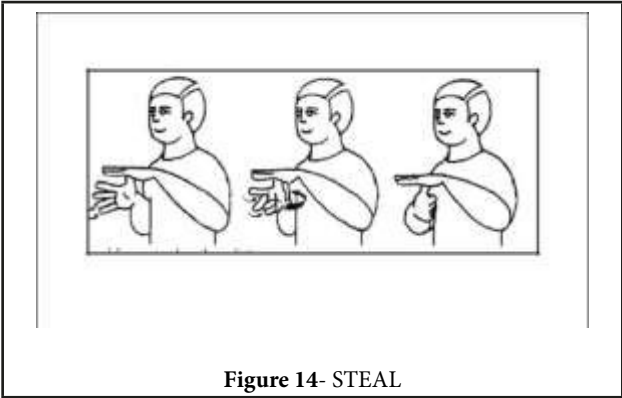
Figure 10- GREEN (PR)

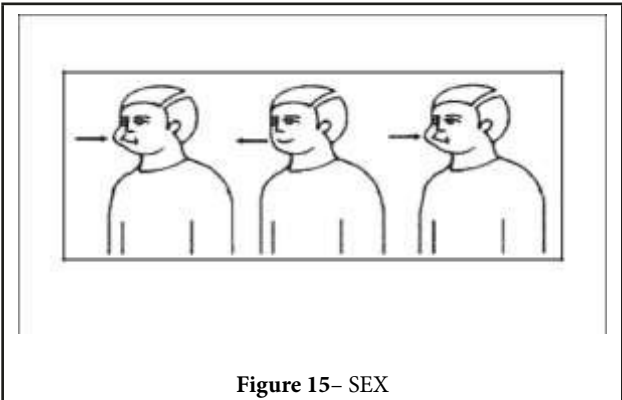**Figure 11**- TRAVEL (RJ)

Figure 12- TRAVEL (SP)

Figure 13– TRAVEL (MG)

Figure 14- STEAL

Figure 15– SEX

The parameters for the TRAVEL (RJ) signal are: CM, n° 63; Articulation Point, neutral space; Movement, open hands, palm to palm, left hand above the right palm. Move your right hand up once.

The parameters for the TRAVEL (SP) signal are: CM n° 42 and 45; Articulation Point, neutral space; Movement, right hand bent up, fingers together. Move the hand forward and up, opening and closing the fingers slightly, repeating three times.

The parameters for the TRAVEL (MG) signal are: CM n° 8ª; Articulation Point, neutral space; Movement, hands in L shape with the tips of the thumbs touching and the palms of the hands down. Move the hands forward and the index fingers down and up, repeating three times.

To understand some social variations, it is important to know that, for the deaf, the action of pointing is natural, as it happens, for example, in the signs: EL@ X AQUEL@ (ALI). The "point" can be used for a person or an object. But the polite way to point at someone is to use one hand to block the pointing action, that is, the active hand points to the passive hand that makes contact. Thus, this difference in the way of pointing represents a diastratic variation in Sign language.

In addition to this situation, we can mention two examples of social variation that occur in the use of facial expressions without the accepted use in polite language, which may indicate informality, or depending on the expression adopted, a pejorative sense. For example, the steal signal. It can be done by hand (figure 14) or non-signal.

Manual expression expressed by a certain movement of the tongue on the cheek. As a situational issue, one of the signs will be more suitable.

Another sign used in different social contexts is SEX. The sign can be done with the hand or a non-manual sign expressed by a certain movement of the tongue on the cheek. (Figure 4 15)

Thus, some signs of the Brazilian Sign Language were presented and analyzed, emphasizing the linguistic variations.

4 and Figures 14 and 15– FaithmanagingCezar Capovilla & Walquiria Duarte Raphael. Trilingual Illustrated Encyclopedic Dictionary of Brazilian Sign Language, 2 volumes: A – L and M – Z signs, Edusp, 2001.

FINAL CONSIDERATIONS

This article presents examples that show that Sign language, like any other language, presents linguistic variations. Among the analyzed signs, it was found that regional, social and historical motivations can influence the production of signs, as verified in the signs: WHITE for the state of Rio de Janeiro and São Paulo; SAD, for Rio de Janeiro, São Paulo and Mato Grosso do Sul; BUT and GREEN, in São Paulo, Paraná and Rio de Janeiro; TRAVEL, São Paulo, Rio de Janeiro and Minas Gerais. Motivations related to the way of signaling, either by social description or by preference of the person who signs, the possible variations in the signs, STEALING and SEX were found.

In order to have a better understanding of Sign language, research is needed to find more variations, thus contributing to people being able to communicate better, as well as in-depth studies on the various factors that contribute to linguistic variations in Sign language.

Among these factors, the following stand out: the historical influence of each generation; the events generated through language by society; the historical, regional and social variations; the relationships present in the social classes, that is, the older deaf people who tend to preserve the old forms; the most educated forms, that is, of social prestige; variations between social classes, changes in lexical items in relation to differences in

age, schooling and sex (male and female); and the distinctions of stigmatized and non-stigmatized, or neutral, or unmarked forms.

Therefore, this work, initially, reports some variations of Sign language in order to contribute to the linguistic research of this visual language.

REFERENCES

BRASIL., Lei nº10.436, de 24 de abril de 2002. **Diário Oficial da República Federativa do Brasil. Dispõe sobre o Reconhecimento da Língua de Sinais Brasileira como língua natural de uma pessoa surda.** Brasília, DF. Disponível em: <http://www.planalto. gov.br/ccivil_03/leis/2002/L10436.htm>Acesso em:13/11/2016.

BRASIL., **Decreto nº5.626 de 22 de dezembro de 2005**. Brasília, DF. Disponível em:Acessoem: 13/11/2016.

CAPOVILLA,F.C.,RAPHAEL,W.D.**Dicionário Enciclopédico Ilustrado Trilíngue da Língua de Sinais Brasileira.** São Paulo, Edusp, Volumes I e II, 2001.

FELIPE, T.; MONTEIRO,M.**SIGN LANGUAGE em Contexto–Curso Básico–Livro do Professor**, 2ª Edição, Brasília: MEC/ SEESP/FNDE, 2008.

FERNANDES, S.; STROBEL, K. **Aspectos Linguísticos da Língua Brasileira de Sinais**,Paraná. Secretaria de Estado da Educação. Superintendência de Educação. Departamento de Educação Especial.Curitiba: SEED/SUED/DEE, 1998.

FERREIRA-BRITO, L. **Uma abordagem fonológica dos sinais da LSCB**. Espaço: Informativo Técnico-Científico do INES, Rio de Janeiro, v.1, p.20-43, 1990.

_____.**Integração Social e Educação de Surdos.** Babel Editora: Rio de Janeiro, 1993.

_____. **Por uma Gramática da Língua de Sinais.** Rio de Janeiro, TempoBrasileiro:UFRJ. DepartamentodeLinguísticae Filologia, 1995.

MONTEIRO, M. **A variação linguística em Língua Brasileira de Sinais.** Monografia apresentada no curso de Especialização Linguística Aplicada ao Ensino do Português, Faculdade de Letras, UFRJ, RJ, 1995.

_____**A Interferência do português na análise gramatical em Sign language: ocaso das preposições.** Dissertação de Mestrado emLinguística. Universidade FederaldeSanta Catarina,Florianópolis, SC, 2015.

PADDEN, C. **The deaf community and the culture of deaf people.** In: WILCOX, S.(Ed) **American Deaf Culture: naanthology.** Burtonsville. MD: Lindtok Press,1989.

QUADROS, R; KARNOPP,L. **Língua de Sinais Brasileira: Estudos linguísticos.** Porto Alegre: Artmed,2004.

SKLIAR,C. **Atualidade da Educação Bilíngue para Surdos.** Vol. 1e2. Editora Mediação, Porto Alegre,1999.

STOKOE, W.C. et. all.**Adictionary of american sign language on linguistic principles**. 2ª Ed. Silver Spring:Linstok Press, [1965]1976.

STROBEL, K. FERNANDES S. **Aspectos linguísticos da língua brasileira de sinais.** Secretaria de Estado da Educação. Superintendência de educação Departamento de Educação Especial. Curitiba. SEED/SUED/DEE, 1998.