Calendric terms in Libras

[Termos de calendário em Libras]

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ABSTRACT: This paper examines the calendric terms used in Brazilian Sign Language (Libras) by deaf signers across different country regions. Using data from the Libras Corpus, which includes productions from deaf signers identified by the deaf community and who participated in the Inventory of Libras as part of the National Inventory of Linguistic Diversity, the study analyzes a set of data representing 17 Brazilian states: Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, and Mato Grosso do Sul. These deaf signers are recognized by the deaf communities they belong to. Libras, a national sign language used throughout Brazil, displays linguistic variation and stability. As a legally recognized national language belonging to the deaf community in Brazil, Libras is a rich and dynamic system. This paper will summarize the context of Libras usage, describe the calendric terms signed across the country, and discuss the variation and stability of these terms that contribute to Libras's status as a national language.

KEYWORDS: Sign languages; Libras; calendric terms.

RESUMO: Este artigo examina os termos de calendário usados na Língua Brasileira de Sinais (Libras) por sinalizadores Surdos em diferentes regiões do país. A partir de dados do Corpus Libras, que inclui produções de sinalizadores Surdos identificados pela comunidade Surda e que participaram no Inventário de Libras como parte do Inventário Nacional da Diversidade Linguística, o estudo analisa um conjunto de dados que representam 17 estados brasileiros: Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Baía, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal e Mato Grosso do Sul. Os sinalizadores Surdos estudados são reconhecidos como representativos das comunidades Surdas a que pertencem. A Libras, uma língua de sinais nacional usada no Brasil, apresenta variação e estabilidade. Como língua nacional reconhecida legalmente pela comunidade Surda no Brasil, a Libras é um sistema rico e dinâmico. O artigo fornece um sumário dos contextos de uso de Libras, descreve os termos de calendário sinalizados no país e discute a variação e estabilidade desses termos, o que contribui para o estatuto de Libras como língua nacional.

PALAVRAS-CHAVE: Línguas de sinais; Libras; termos de calendário.

1. Libras and its users

Brazilian Sign Language (Libras) is a national sign language used by the deaf community in Brazil, extending across the entire country, particularly in urban areas. It's not confined to a specific geographic region but is widely dispersed throughout the nation, much like the Portuguese language. Libras thrive wherever deaf people gather in shared spaces, such as deaf associations, deaf schools, meeting points, churches, and other locations (Quadros, 2021).

Libras' linguistic status is supported by extensive research over the past 40 years (Ferreira-Brito, 1984, 1995; Quadros, 1999; Karnopp, 1999; Quadros, 2021; Quadros *et al*., 2023). Furthermore, it has legal recognition through Law 10.436 of 2002, often called the Libras Law by the deaf community. This law formally recognizes Libras as the national language of the deaf community in Brazil. This legal recognition has significantly impacted language policies since its enactment, promoting the inclusion of Libras in education. There are now four-year university programs aimed at training Libras teachers and translators/interpreters. Bilingual education is also being established nationwide because of language planning initiatives that followed the Libras Law, including actions related to creating a Libras corpus.

Numerous research projects focused on Libras are helping to solidify the linguistic status and promoting attitude changes among deaf and hearing people nationwide (Brito, 2013; Quadros & Stumpf, 2019). Quadros (2017) identifies Libras users as a distinct type of heritage sign language users. While most often deaf, users can also be hearing individuals. Those considered native signers are children of deaf parents, including both deaf and hearing children. These children grow up immersed in Libras, interacting with other deaf people in the community. The spaces where they develop this heritage include deaf associations and other meeting points. From an early age, these children live with their parents and the deaf community, making Libras a true family and community language. However, most deaf people are born into hearing families who may not know sign language. Whether these children acquire sign language early on depends on their parent's

awareness of their child's deafness and the guidance they receive from others. If they have early access to Libras, they often become bilingual.

In most cases, deaf children are provided with sign language interpreters in inclusive schools. While this professional serves as their initial language model, these interpreters are typically introduced in the first grade of elementary school, a relatively late stage in their development. It is often only much later that these children encounter other deaf peers and deaf adults within the deaf community. This meeting with the deaf community profoundly impacts their lives, as a sense of belonging is immediately established based on their shared experience of deafness. The deaf people often discover their deaf identity through this connection with the deaf community.

The inheritance of language is typically passed down within families. However, for deaf signers, this inheritance is often passed down by deaf adults (Quadros, 2017). When deaf children are born into deaf families, they inherit Libras from their parents. However, most deaf people will inherit Libras from other deaf adults, even when they have contact with Libras used by sign language interpreters in schools. The heritage of Libras is more than just language; it carries culture and identity. Language is a social practice that embodies culture and shapes identities. For deaf people, Libras is inherited at the heart of the deaf community and passed down through interactions with deaf adults.

2. Libras Corpus

Data collection for the Libras Corpus varies depending on the research project. The Libras Corpus encompasses a diverse range of data, including: (1) sign language acquisition: longitudinal data collected over three years with deaf children of deaf parents (2 children), deaf children of hearing parents with cochlear implants (1 child), deaf children with cochlear implants and deaf parents (1 child), and hearing children of deaf parents (3 children); (2) adult production in Libras: a wide range of sign language settings from various projects featuring adult productions in Libras, including: (a) narratives from ProLibras Tests (a national exam featuring deaf people

telling stories); (b) academic productions of deaf signers from Letras Libras, a sign language program (bachelor and *licenciatura*, a course to graduate teachers); (c) informal collections of literature in Libras from the Letras Libras program; (d) inventory of Libras from *Florianópolis*, a specific project that uses a standardized methodology to archive Libras data based on productions and interactions of local deaf signers; (e) inventory of Libras based on deaf references from various regions of Brazil; (f) other data sources.

The data analyzed for this paper is part of the National Inventory of Brazilian Sign Language, organized by state and available in the Libras Corpus at https://portal-Libras.org/.

2.1. National Inventory of Language Diversity

In 2010, Decree 7.387 established the National Inventory of Language Diversity, an instrument of identification, documentation, recognition, and valorization of the Brazilian languages, considering these languages a kind of legacy of Brazilian society, its identity, action, and memory from different groups that integrate our country. This official document recognized the languages as Brazilian cultural references that must be taken care of as part of the country's heritage and our people.

Because of this document, the Culture Ministery (*Ministério da Cultura*) at the National Institute of Historical and Artistic Heritage (IPHAN) established a guide for documenting Brazilian languages to integrate them into the Brazilian Languages, recognizing their status as languages that need to be taken care through official language policies. In this guide, they included sign languages as languages that are used by deaf and hearing people in deaf communities, citing Brazilian Sign Language (Libras), as well as other sign languages, such as Cena Sign Language (Pereira, 2013), Urubu-Ka'apor Sign Language, Caiçara Sign Language, among others (Quadros & Silva, 2017; Quadros, 2019).

The actors involved in the language documentation include the linguistic communities of practices, the political agents, and the civil society and their institutions, such as researchers, educators, and translators. Concerning sign

languages, the general proposal is to document Libras throughout the country, starting with the capitals, where there is more concentration of deaf people. Also, the proposal is to begin the documentation of other sign languages spread across the country. For this paper, we focus on the National Inventory of Libras.

2.2. National Inventory of Libras

The Libras Inventory represents a significant component of the Libras Corpus, establishing a standardized methodology for data collection with procedures designed to be replicated across the country. The methodological standard developed for the Florianópolis area in Santa Catarina served as a pilot project, subsequently implemented nationwide. This approach aligns with the criteria outlined in the base document for the National Inventory of Linguistic Diversity. The standardized methodology ensures the comparability and qualitative equivalence of data across Brazil. This consistency in data collection, processing (editing and annotation), and storage provides a corpus with consistent records of Libras, facilitating research in areas such as Linguistics, Literature, and Culture.

The data collected through this methodology supports both linguistic studies of Libras and research on literature in Libras. The specific procedures for data collection for the Libras Corpus include: (1) a research professor connected to a university (this person serves as the primary researcher for the project); (2) a local deaf researcher (a deaf leader within the deaf community who could potentially serve as the research professor at the university); (3) 36 deaf people from each state capital (these signers, who are recorded in pairs, resulting in 18 interviews, meet the following criteria: (a) they were born in the state capital where the project is situated or have resided there for at least 10 years; (b) they acquired Libras before the age of 7, or have been exposed to the language for at least 7 years, or are recognized within the community for their proficiency in Libras; (c) the dyads are formed by people who know each other well (friends or relatives), preferably of the same gender and age.

Furthermore, it is crucial that, among the 18 dyads to be interviewed, the local researcher carefully selects couples with diverse profiles, considering criteria such

as (a) generational representation (the sample should include deaf people representing approximately three distinct generations: young people (up to 29 years), adults (between 30 and 49 years), and older individuals (50 years and older)); (b) gender representation (the sample should include both deaf men and women); (c) educational background (the sample should include deaf people with diverse educational backgrounds, representing those with up to 14 years of schooling, up to 17 years of schooling, and those who have completed higher education). All participants in the project provided informed consent without any restrictions on using and distributing their images for inclusion as informants. These terms are further outlined in the Consent forms.

In addition to this core dataset, we collected data from deaf people identified by deaf communities across the country, representing 17 states. This data collection followed the guidelines established by the National Inventory of Linguistic Diversity, which focuses on identifying community references. References are individuals recognized by the deaf community as representatives due to their language skills, cultural knowledge, intellectual expertise, and leadership. While the deaf community may not always consider all these aspects equally, these people are included as participants, representing the broader Libras community. Our dataset contains 36 deaf references.

Following the guidelines of the National Inventory of Linguistic Diversity and the specific parameters of the National Inventory of Libras, data collection involved interviews focusing on (a) personal stories (interviews that explored the individual experiences of each participant), (b) open conversations (open-ended discussions that allowed for a more natural exchange of ideas); (c) thematic conversations (discussions focused on specific topics relevant to the research); (d) narratives (stories and accounts shared by participants); (e) vocabulary assessment (this included the 100 words of the Swadesh List (Lehmann, 1962), a standard tool for assessing vocabulary in different languages). Each pair of participants contributed approximately three hours of data to the study.

For this study, we analyzed the vocabulary assessment data from the Libras Corpus, focusing specifically on the calendric terms used by the deaf signers in our

sample. The following section presents a description of these calendric terms in Libras.

3. Numbers and calendric terms in Libras

This section presents a collection of calendric terms found in Libras across various country regions and the corresponding numbers. We will then analyze each set of terms' phonological and morphological details, considering their semantic and iconic aspects. Finally, we propose examining the "stable" linguistic information observed across the variation.

Phonological and morphological information are crucial for analyzing words in sign languages. The traditional perspective views phonological units as meaningless, while morphological units carry meaning. However, this division presents theoretical challenges, as some phonemes may appear to convey meaning (potentially becoming morphemes), and there are instanmorphemes (e.g., Bybee, 1988; Waugh, 1996). In sign languages, the complex relationship between phonology and morphology has also been explored (e.g., Crasborn, 2012), particularly when considering the role of iconicity (Hulst & van der Kooij, 2020). Numbers and calendric terms provide excellent examples of this relationship, highlighting the role of iconicity in which a handshape can acquire meaning based on its iconic representation.

Iconicity is a key concept in sign language research, as these languages are embodied, using the hands, face, and other body parts to encode language, unlike spoken languages. This embodiment means that phonological and morphological information utilize these bodily elements and their potential to convey words and meaning. A handshape, a location, a movement, an orientation of the movement, a non-manual facial expression, or even a change in body form can impact the language in a highly linguistic manner, but also in a visually suggestive way, often referred to as an iconic form (Taub, 2012).
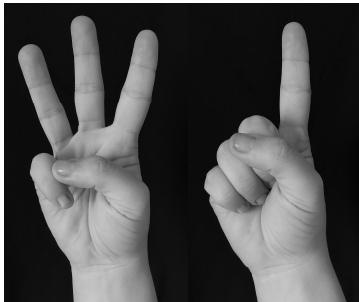
When analyzing numbers and calendric terms in sign languages, we observe these components working together in a highly systematic and linguistic way.

The numbers in Libras present two main variations:

States	1	2
Rio Grande do Sul and São Paulo		
Santa Catarina, Paraná, Rio de Janeiro, Minas Gerais, Bahia, Pernambuco, Alagoas, Sergipe, Ceará, Piauí, Amazonas, Pará, Brasília, Amapá, Mato Grosso do Sul		

This variation applies to numbers such as 10, 11, 12, and so on, as well as 20, 21, 22, 23, and so on. We provide an example of this variation below:

States	21	31
Rio Grande do Sul, São Paulo		
Santa Catarina, Paraná, Rio de Janeiro, Minas Gerais, Bahia, Pernambuco, Alagoas, Sergipe, Ceará, Piauí, Amazonas, Pará, Brasília, Amapá, Mato Grosso do Sul		

We observed variability in the signing of the number 10 among participants from São Paulo and Rio Grande do Sul. While some signers used the standard form of 10, as seen in other parts of the country, others produced a distinct form, consistent with the use of indicators 1 and 2 in different numbers (using the index finger and thumb for 1 and 2). Signers in these two states consistently used the index finger for 1 and 2, while the other 15 states consistently used the thumb finger for 1 and 2.

These two variations reflect consistent phonological differences in handshape but carry morphological implications, as the semantic information is embodied within the sign form. Both variants convey the semantic (iconic) meaning of quantity embedded in the handshape, making them more morphemic than purely phonological. However, these two variations can also be analyzed as distinct phonological forms, as the iconic information reinforces the concept of tens, hundreds, thousands, etc. They function as morphemes that overlap phonological forms.

Now, let's examine calendric terms in Libras. These terms often represent a cyclical pattern established by nature or by humans. Their phonological and morphological forms reinforce the organization of time encoded within these terms. In sign languages, this reiteration is inherently linked to semantics, particularly through iconicity, even when variations in the signs exist.
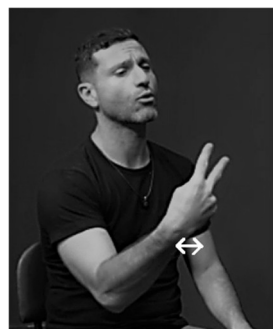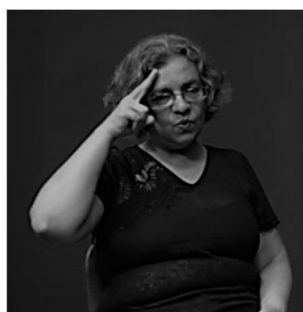
The weekday signs, from Monday to Thursday, exhibit only two main variations.

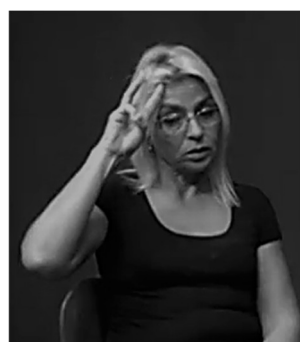| States	MONDAY
Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, Mato Grosso do Sul	
São Paulo, Rio Grande do Sul	

States	TUESDAY
Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, Mato Grosso do Sul	
São Paulo, Rio Grande do Sul	

States	WEDNESDAY
Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, Mato Grosso do Sul	
São Paulo, Rio Grande do Sul	

States	THURSDAY
Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, Mato Grosso do Sul	
São Paulo, Rio Grande do Sul	

States	FRIDAY
Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Alagoas, Pernambuco, Sergipe, Ceará, Piauí, Pará, Amazonas, Amapá, Distrito Federal, Mato Grosso do Sul	
São Paulo	

The signs for weekdays, from Monday to Thursday, exhibit two main variations. Both are produced in the same way, differing only in the sign's location: one variant uses the neutral space, while the other uses the forehead. Some signers also include the sign for Friday within this set, although there is a metaphoric sign often represented with the sign FISH for Friday. This is due to the traditional practice of eating fish exclusively on Fridays, a religious custom some Christians observe, particularly during Lent.

Despite these variations in location, the signs for Monday to Friday, whether signed in the neutral space or on the forehead, retain consistent number information, using the index finger to encode the numbers (even among signers who typically use the thumb finger for numbers). The numbers embedded in these signs represent stable phonological/morphological forms preserved across both variants. Xavier and Barbosa (2017) analyzed various Libras variations and found that, despite the differences in sign form across multiple parameters, these variations still exhibit a notable degree of stability. The authors argue that the retention of stability among signers ensures the accurate perception of the signs. The number information embedded in the weekday signs remains consistent, even
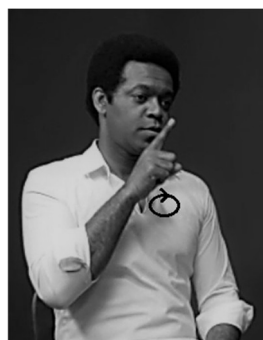
though the location changes. Importantly, all signers understand the variations in these signs for weekdays. The preservation of the numbers associated with the specific days is sufficient for clear perception of these signs.

The signs for Saturday and Sunday do not exhibit any variations:

SATURDAY

SUNDAY

The signs for Saturday and Sunday have lost their original motivations, if they ever had them, since their adoption by the deaf community. Today, they are largely arbitrary, differing significantly from the pattern observed for weekdays, which maintain a consistent location, movement pattern, and use of number forms to represent each day of the week. FISH for Friday, SATURDAY and SUNDAY have distinct motivations, if they have any at all in the case of SATURDAY and SUNDAY, that are no longer readily apparent.

The signs for week also exhibit some variations:

States	WEEK
Pará, Rio Grande do Norte, Sergipe, Minas Gerais, Paraná, Bahia, Piauí, Amazonas, Pernambuco, Ceará	
Mato Grosso do Sul, Minas Gerais, Santa Catarina, Rio Grande do Sul, Pará	
São Paulo, Rio de Janeiro, Rio Grande do Norte, Amapá, Santa Catarina, Distrito Federal	
Rio Grande do Sul	
Pernambuco, Rio de Janeiro	

The signs for week exhibit variations in handshape, often driven by distinct motivations, yet all maintain a strong iconic factor. The first four variations of this sign maintain the same location, neutral space, and movement pattern. This consistency in location and movement suggests that two phonological parameters remain stable, ensuring the sign's recognizability as WEEK despite the different handshapes. The first two signs are produced with both hands representing seven days: the left hand has five fingers extended, while the right hand has two fingers extended, summing to seven fingers – a visual metaphor for the seven days of the week. The third variation appears to have been influenced by American Sign Language, using a single-finger handshape to represent the entire week. The fourth variation, from a signer from Rio Grande do Sul, combines the individual weekday signs within the same neutral space used for other variations. The location remains consistent, and the relationship with the original sign is preserved. The subsequent variation follows the same pattern as Rio Grande do Sul but uses the forehead, their preferred location for signing individual weekdays. Across all these examples, we see a consistent use of phonological and morphological information, allowing for the continued recognition of the signs.
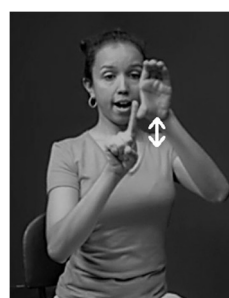
The sign for calendar also exhibits variation.

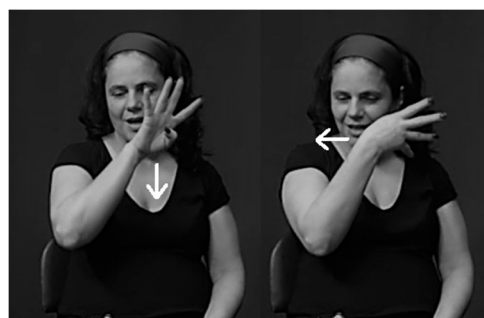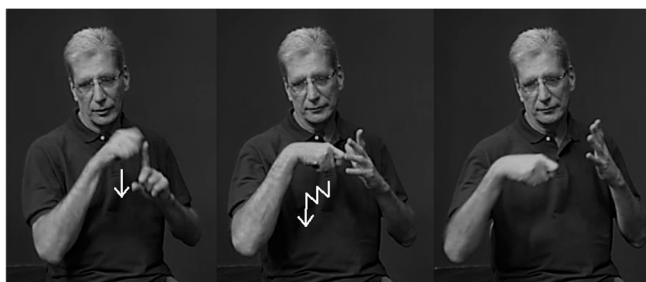| States	CALENDAR
Santa Catarina, Sergipe, Rio Grande do Norte, Bahia, Ceará, Pará	
Rio de Janeiro, Minas Gerais, Santa Catarina, Rio Grande do Sul, São Paulo, Amazonas	

States	CALENDAR
Minas Gerais, Rio Grande do Sul, São Paulo, Distrito Federal	
Minas Gerais, São Paulo	

We identified four variants of the sign CALENDAR among our participants, each displaying distinct patterns. The first and last variants are both linked to the sign MONTH. The handshape used for both, featuring the index finger, is also employed for the sign MONTH, suggesting that this particular handshape is associated with the concept of month, potentially reinforcing its morphemic status within the sign language. In the first variant, the "C" handshape is used, possibly influenced by the Portuguese word *calendário* (calendar), demonstrating a potential contact language effect. The last variant simply repeats the sign MONTH, implying the concept of multiple months as part of a calendar. The variant observed in Rio de Janeiro, Minas Gerais, Santa Catarina, Rio Grande do Sul, São Paulo, and Amazonas resembles a more iconic representation of a traditional calendar still commonly used in Brazil (see Figure below). A similar variant, produced by Minas Gerais, Rio Grande do Sul, São Paulo, and Distrito Federal signers, demonstrates this visual link.

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FIGURE 1 - Usual physical calendar form

(Source: https://www.icloud.com/calendar/)

The signs for months of the year can exhibit variation, often driven by phonological, morphological, or semantic factors. However, the first letter of the corresponding Portuguese word generally determines the basic sign for each month in Libras. This pattern is consistently observed in various states, as seen in one variant across most months. Furthermore, many other month words are strongly influenced by semantic factors, reflecting the events or activities associated with each month. One example is FEBRUARY.

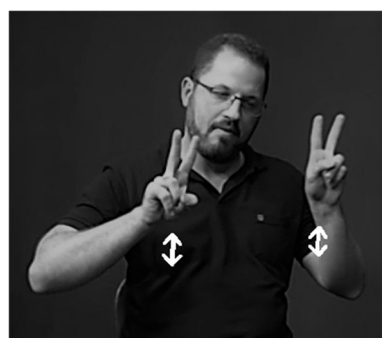| States	FEBRUARY
Rio de Janeiro, Santa Catarina, Rio Grande do Norte, Sergipe, Minas Gerais, Paraná, Bahia, Rio Grande do Sul, Pernambuco, São Paulo, Amapá	
São Paulo, Minas Gerais, Mato Grosso do Sul, Pernambuco, Rio Grande do Sul	

States	FEBRUARY
São Paulo, Santa Catarina	
Pernambuco	
Amapá	

The sign for February, beyond the initial letter sign (F) from the Portuguese word *fevereiro*, is strongly influenced by the sign for Carnival, which typically occurs this month. Therefore, all these variants of FEBRUARY can be seen as variations of CARNIVAL in Libras.

The sign for March is also based on the Portuguese word *março*. One variant employs the full fingerspelling of the word, while another uses the fingerspelled contraction "MÇ." In São Paulo, one participant used the sign MARCH with two fingers (index and middle fingers), a variation likely influenced by the movement against the use of initials in the state. Some individuals in São Paulo also suggest that the handshape for "M" might be influenced by speech therapy practices, as the sound "R" in "march" might be associated with the "M" handshape. In Santa Catarina, the

sign for March is motivated by distinct cultural influences. The Santa Catarina sign is a metaphor representing "someone with a rope around their neck," symbolizing a lack of funds or a tight budget. This sign refers to March because it is the month when Brazilians must pay their taxes. In these instances, the variation is not driven by phonological or morphological features but rather by cultural and historical factors.

States	MARCH
Mato Grosso do Sul, Rio de Janeiro, Santa Catarina, Rio Grande do Norte, São Paulo, Paraná, Minas Gerais, Rio Grande do Sul, Amazonas	
Rio Grande do Sul, Santa Catarina, Sergipe, Bahia, Pernambuco, Amapá, Pará	
Santa Catarina	
São Paulo	

The sign for April, sometimes fingerspelled (as observed in other months), is most represented by the sign TO-HANG, which alludes to Tiradentes, a significant figure in Brazilian history who was hanged. This sign is used throughout Brazil. However, one signer from Rio Grande do Sul uses the sign RABBIT, connecting it to the Easter holiday. These variations, like those observed for MARCH, are rooted in cultural contexts.

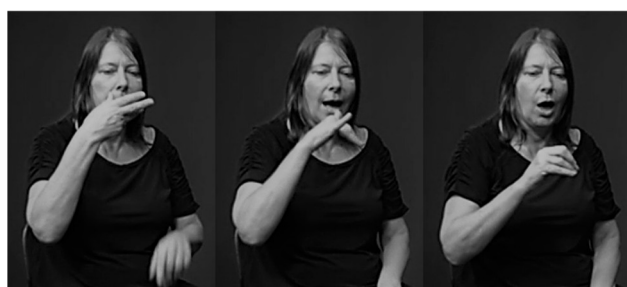| States	APRIL
Mato Grosso do Sul, Santa Catarina, Rio Grande do Norte, São Paulo, Paraná, Minas Gerais, Rio Grande do Sul, Pernambuco, Amapá, Pará, Amazonas, Piauí, Sergipe, Bahia, Distrito Federal	
Rio Grande do Sul	
Rio de Janeiro	

Most deaf people across the country typically fingerspell the sign for May. Two other variants, also inspired by the Portuguese spelling of the month, are

observed. However, some states have developed their distinct signs for May. In São Paulo, Minas Gerais, and Santa Catarina, the sign is produced by touching the neck, alluding to the tradition of slaughtering cattle this month. This practice, once common, is now largely symbolic. A deaf person from Mato Grosso do Sul uses the sign SAINT-MARY for May, possibly linking the sign to Mother's Day. These variations are also rooted in cultural reasons, providing a glimpse into the rich diversity of sign language practices.
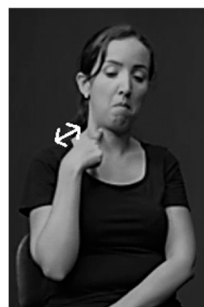
States	MAY
Rio de Janeiro, Santa Catarina, Rio Grande do Norte, São Paulo, Paraná, Minas Gerais, Rio Grande do Sul, Pernambuco, Amapá, Amazonas, Bahia, Sergipe, Piauí, Distrito Federal	
São Paulo, Minas Gerais, Santa Catarina	
Rio Grande do Sul	
Pernambuco	

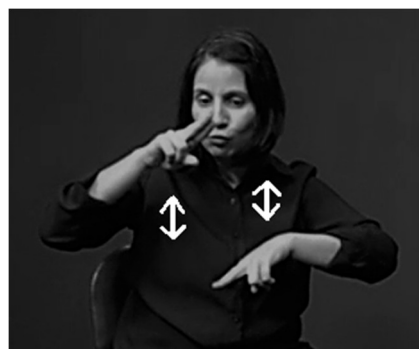| States	MAY
Mato Grosso do Sul	

The sign for June often references a firepit, evoking the traditional bonfire celebrations that are popular in Brazil this month. These festivities typically feature large bonfires around which people dance, highlighting the cultural influence behind this particular sign. While the firepit sign is prevalent, other variations of the sign JUNE are based on the Portuguese spelling of the month.

States	JUNE
Mato Grosso do Sul, Santa Catarina, Rio Grande do Sul, São Paulo, Paraná, Minas Gerais, Rio Grande do Norte, Pernambuco, Amapá, Pará, Amazonas, Sergipe, Rio de Janeiro, Bahia, Distrito Federal, Piauí	
Rio Grande do Sul	

The signs for July are all based on the month's Portuguese spelling. However, the first variant also evokes the traditional bonfire celebrations that are common in

Brazil during this month, while the last variant alludes to the colder weather associated with winter.
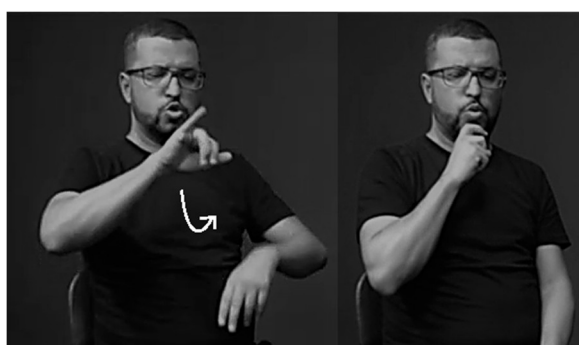
| States	JULY
Mato Grosso do Sul, Santa Catarina, Rio Grande do Sul, São Paulo, Paraná, Minas Gerais, Rio Grande do Norte, Pernambuco, Amapá, Pará, Amazonas, Sergipe, Rio de Janeiro	
Rio de Janeiro, Minas Gerais, São Paulo	
Distrito Federal	

The sign for August is typically based on the month's Portuguese spelling. However, some signers sign it by touching their chest, although the reason for this variation remains unclear. One deaf person suggested that it might be related to the tradition of taking a shower in August, as the sign TO-TAKE-A-SHOWER shares the same handshape as this chest-based variant of AUGUST. This variant, however, is also signed using the letter "A" based on the written form in Portuguese.

States	AUGUST

Rio de Janeiro, Sergipe, Rio Grande do Norte, Rio Grande do Sul, Minas Gerais, Distrito Federal, Santa Catarina
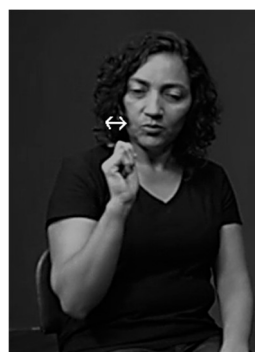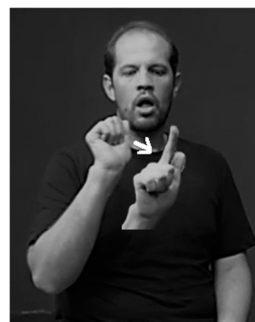

Minas Gerais, Paraná, Santa Catarina, Sergipe, Distrito Federal, São Paulo, Rio Grande do Sul

São Paulo, Bahia, Rio de Janeiro

Ceará, Pernambuco, Piauí

Rio de Janeiro

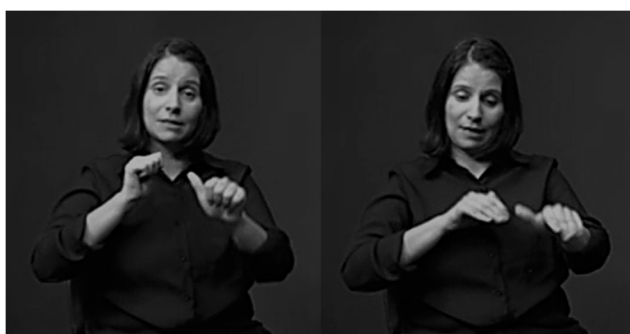|	
States	AUGUST
Rio de Janeiro, São Paulo, Mato Grosso do Sul	

The sign for September is rooted in cultural significance, alluding to the marches across Brazil on September 7th, Brazil's Independence Day. This sign is often associated with parades. Signers from Rio Grande do Norte and Rio de Janeiro also use a sign that refers to a soldier's helmet, sharing the same cultural motivation as the parade sign.
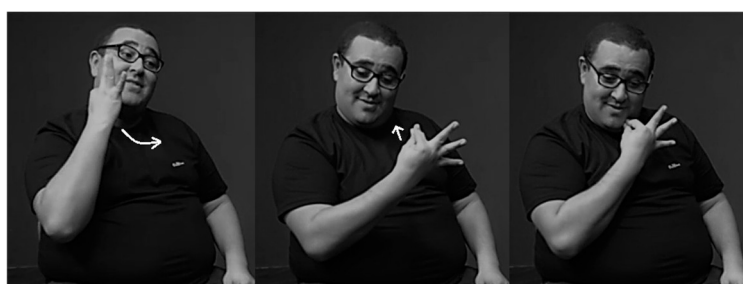
States	SEPTEMBER
Minas Gerais, Mato Grosso do Sul, Rio de Janeiro, Pará, Sergipe, Paraná, Rio de Janeiro, Rio Grande do Sul, Pernambuco, São Paulo, Amapá, Piauí, Santa Catarina, Bahia	
Rio Grande do Norte, Rio de Janeiro	

The months of January, October, November and December do not exhibit variations in their signs. The first three months are typically represented by initial-letter signs based on the Portuguese spelling. DECEMBER, however, is often associated with Santa Claus, reflecting the Christmas season.

| JANUARY | OCTOBER | NOVEMBER | DECEMBER |

The variants of calendric terms can be categorized into the following types:

TABLE 1 - Category of the signs

Reasons for variation	Category of the sign
Language contact (initialized signs or fingerspelled signs)	Almost all the month names.
Phonologic/morphological derivation	Numbers (1 and 2 and tens, hundreds, thousands, etc.), weekdays (the sign for the whole week, individual days of the week).
Iconicity	Signs for week (movement including all the seven days expressed in the use of the seven fingers), month (the movement following the days of the calendar), calendar (the grade or the change of the sheet when a month is over) and numbers allusive to quantity (one and two).
Cultural aspects	Celebrations that happen across the year may determine the sign used for month names: February, March, April, May, June, September, December.

(Source: Authors own elaboration)

These potential reasons for variations in signs are also observed in other languages. Sociolinguistics explains the influence of language contact on the creation and integration of neologisms into another language. Phonological and morphological changes among signs can be analyzed through linguistic principles

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emphasizing economy and adhering to language rules. Semantic factors associated with iconicity are relevant to how this language encodes meaning in the body, utilizing different parts of the body to convey ideas. Finally, cultural aspects are connected to the strength of the community and a group of people's shared experiences and traditions. Cultural influence is a significant factor in the variation observed across languages (e.g., Aragão, 2013, for Brazilian Portuguese). Aragão (2013) argues that a lexicon set representing a variant of a specific language reflects a worldview, an ideology and a value system embedded within that linguistic community's sociocultural practices. In this sense, a lexical unit can be closely linked to the community's context, acting as a cultural manifestation. Connecting month-related signs to events or activities in the community during that specific month exemplifies this cultural imprint on the lexicon. For example, the sign for February is associated with Carnival, and the sign for April is linked to hanging, as observed with other months in Libras. These connections highlight the distinct cultural aspects embedded in this sign community. Examining the data, we find that variations in Libras are extensive, reflecting the vastness and diverse nature of the country.

However, after analyzing all these variants, we found that they exhibit considerable stability, as Xavier and Barbosa (2017) noted. This stability facilitates the recognition of signs by different signers across the country and contributes to the emergence of Libras as a national sign language.

Final remarks

The calendrical terms in Libras provide evidence of variation as a key aspect of the linguistic diversity within the country while also highlighting the stability of the Libras language. We have identified a balance between variation and stability in these signs, which allows them to be integrated into a cohesive language that is understandable among the deaf community nationwide. Conversely, the variations observed among participants from different regions underscore the richness of this language. Additionally, these variations point to several motivations for regional differences: (1) language contact (including initialized signs or fingerspelled signs),

(2) phonological and morphological changes, (3) iconicity, and (4) cultural aspects. Such types of variation are also present in other languages and are influenced by linguistic factors, sociolinguistic forces (such as language contact), and cultural reasons.

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