



# Dactylogological Sign in Libras (Brazilian Sign Language)

Raniere Alislan Almeida Cordeiro  
Aline Lemos Pizzio

**Introduction:** The current study addresses dactylogological sign (fingerspelled sign) in Libras defined as a lexicon formed by dactylogy (fingerspelling) that has several ways of articulation, being a peculiar characteristic of this language. The relevance of dactylogological sign to understand the productive phonological relationship between Portuguese language and Libras leading to linguistic borrowings from the spoken language becoming items in the lexicon of Libras. As theoretical foundation, the main theories addressed are:

- lexical borrowing, lexicalized fingerspelling and loan sign of ASL (BATTISON, 1978) and of BSL (SUTTON-SPENCE, 1994);
- types of coarticulation in ASL fingerspelling: anticipatory and perseverative (WILCOX, 1992; CHANNER, 2012);
- typology of linguistic borrowing of Libras, directing to lexicalized transliteration loans (*empréstimos por transliteração lexicalizada 'semi-datilológico'*) (FARIA-NASCIMENTO, 2009);

**General Objective:** to catalog the dactylogological signs and describe the possible phonological adaptations they undergo in Libras.

**Specific Objectives:**

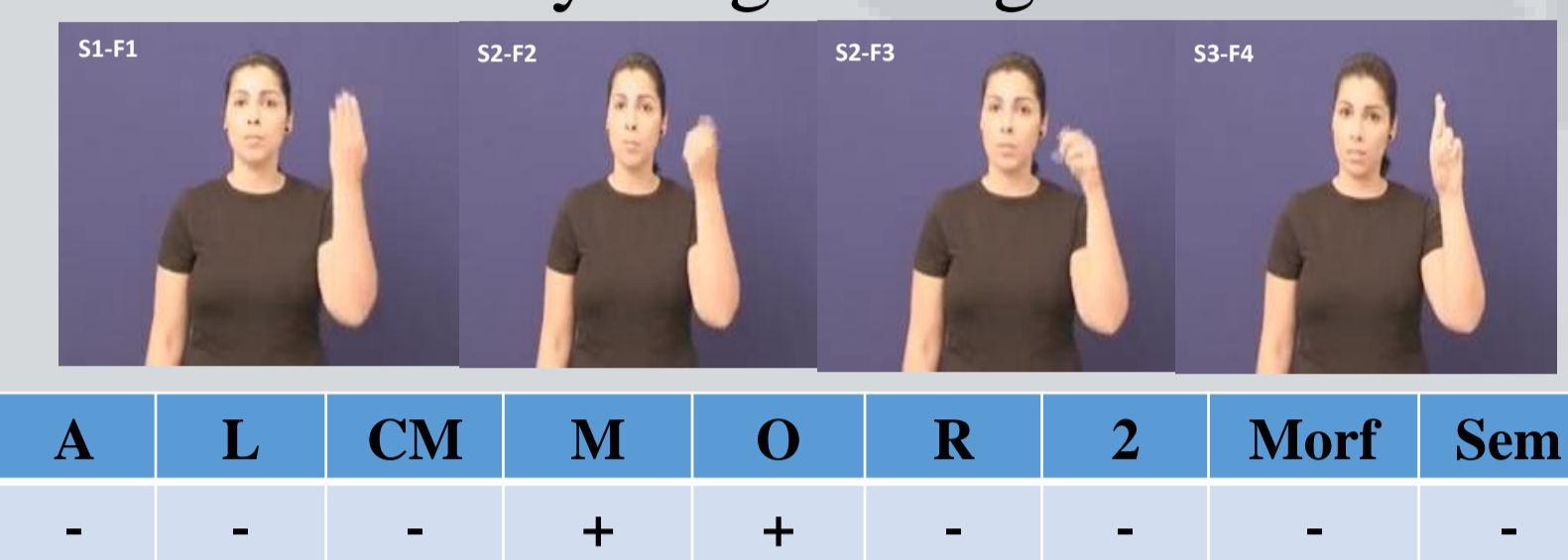
1. Analyze the dactylogological signs comparing with their respective equivalent fingerspelled words in segments in the canonical form of the Libras manual alphabet in an online dictionary;
2. Define and classify categories and their relationship to phonological processes in Libras.

**Methodology:**

- **Qualitative approach:** the description of dactylogological signs, classifying them in categories with relation of phonological processes.
- **Data collection:** 147 entries of dactylogological signs taken from the Digital Dictionary of Brazilian Sign Language – version 3 available on: [http://www.acessibilidadebrasil.org.br/libras\\_3/](http://www.acessibilidadebrasil.org.br/libras_3/) - *Dicionário da Língua Brasileira de Sinais V3 - 2011 (FELIPE & LIRA, 2011).*
- **Procedures:** cataloging, description and analysis of the dactylogological signs with the canonical form of the Libras manual alphabet to identify the phonological changes following Battison's criteria about restructuring profiles which there are nine categories: deletion (A); location (L); handshape (CM); movement (M); orientation (O); reduplication (R); second hand (2); morphological involvement (Morf); Semantics (Sem).

There was the realization of the phonological adaptation of the collected data to define its types of coarticulation that may be anticipatory or perseverative (WILCOX, 1992).

**Data Analysis:** Dactylogological Sign: #BAR



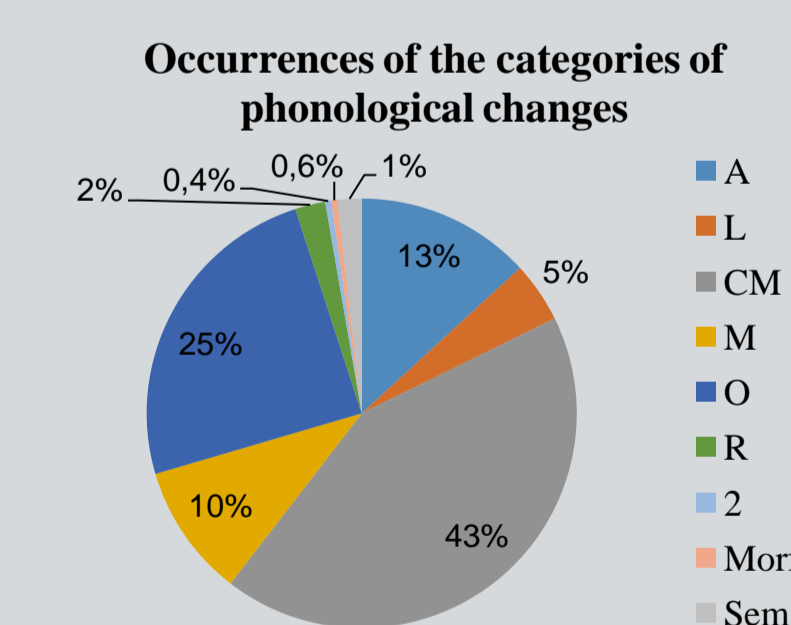
Movement (M)	
Canonical movement of manual alphabet	Phonological adaptation of #BAR
Segment [A] in canonical movement of manual alphabet: static.	Second segment [A] of #BAR: pronation movement is articulated.
Orientation (O)	
Canonical orientation of manual alphabet	Phonological adaptation of #BAR
Segments [B] and [A] in canonical palm orientation of manual alphabet: outward.	First and second segment [B] and [A] of #BAR: palm orientation inward.

**Coarticulation:**  
Anticipatory (CA) and Perseverative (CP)

	-	-
CA	-	-

In the first segment there is the effect of anticipatory coarticulation, due to the implication of the posterior segment, in which its palm orientation is also oriented inward from the hypothesis of the old manual alphabet of letter A, whose palm orientation was contralateral with the arm positioned horizontally. Therefore, in diachronic analysis, in #BAR the palm orientation of segment [A] changes inward and the arm position becomes vertical.

**Results:** The percentage occurrences of the categories of restructuring profile of the dactylogological signs are presented in the following graph, and is related to the table beside.



A	L	CM	M	O	R	2	Morf	Sem
29	10	94	22	55	5	1	2	4

**Conclusions:** This research revealed that although the dactylogy is a loan of the Portuguese language, in the process of lexical adoption, the dactylogological signs undergo phonological adaptations that occur naturally. This work is relevant to the phonological studies of the Libras, as it contributes to the linguistic area, being a dactylogological sign a feature of constant use in the lexical productivity of the Brazilian deaf community. It also reinforces the form of linguistic registration and language description used for the enhancement and perpetuation of sign language in Brazil.

**References:**

BATTISON, R. *Lexical borrowing in American Sign Language*. Silver Spring: Linstok Press, Inc, 1978. 149 p.

CHANNER, C. S. *Coarticulation in American Sign Language Fingerspelling*. Linguistics ETDs. Paper 8. Albuquerque, 2012. p.40. Dissertação (Mestrado em Linguística) - University of New Mexico.

FARIA-NASCIMENTO, S. P. *Representações Lexicais da Língua de Sinais Brasileira. Uma Proposta Lexicográfica*. Brasília, 2009. 290 p. Tese (Doutorado em Linguística) - Instituto de Letras, Universidade de Brasília.

SUTTON-SPENCE, R. *The Role of The Manual Alphabet and Fingerspelling in British Sign Language*. Bristol, 1994. 432 p. Tese (Doutorado), University of Bristol.

WILCOX, S. *The phonetics of fingerspelling*. Philadelphia: John Benjamin Publishing Company, 1992. 108 p.