

The evolution of verbal paradigms: A computer- assisted approach to Mocoví language-internal comparison

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Many South American languages exhibit complex systems of argument coding, which can also help identifying verbal inflectional classes. In recent years, our understanding of the evolution of argument coding systems and inflectional classes has progressed through specific studies exploring these grammatical domains (see, for instance, the collection of papers edited by Gildea and Guillaume 2018). In line with this previous research, this paper analyzes the internal evolution of bound person markers in Mocoví (moco1246), a Guaycuruan language spoken in the South American Gran Chaco region, following principles of computer-assisted language comparison (Wu et al. 2020).

ID	ROOTID	GRAM FORM	CONCEPT	LANGUAGE	IPA	TOKENS	ALIGNMENT
100	9 ¹¹	1SG	grill	XIX_MOC	diaktogot	d i a k t o g o t	d i a k t o - g o - t - - -
101	9 ¹¹	2SG	grill	XIX_MOC	daktogkti	d a k t o g k t i	d - a k t o - g - k t i - - -
102	9 ¹¹	3SG	grill	XIX_MOC	da:ktogot	d a : k t o g o t	d - a : k t o - g o - t - - -
103	9 ¹¹	1PL	grill	XIX_MOC	diakto:ktaq	d i a : k t o : k t a q	d i a : k t o : - k - - t a q
104	9 ¹¹	2SG	grill	XIX_MOC	daktokti	d a k t o k t i	d - a k t o - k - - t i - - -
105	9 ¹¹	3PL	grill	XIX_MOC	da:ktokte	d a : k t o t k t e	d - a : k t o t k - - t e - - -
106	9 ¹¹	1SG	grill	MODERN_MOC	d3atooet	d3 a t o o e t	d3 - a - t o - e o - t - - -
107	9 ¹¹	2SG	grill	MODERN_MOC	ratooetfi?	r a t o o e t f i ?	r - a - t o - e o - t f i ? - -
108	9 ¹¹	1PL	grill	MODERN_MOC	d3atootaq	d3 a t o o e t a q	d3 - a - t o - e o - t a q - -
109	9 ¹¹	2PL	grill	MODERN_MOC	ratooetfi:	r a t o o e t f i :	r - a - t o - e o - t f i : - -
110	9 ¹¹	3PL	grill	MODERN_MOC	ratooete?	r a t o o e t e ?	r - a - t o - e o - t e ? - -

Figure 1. Verb paradigm following Set I in Old and Modern Mocoví annotated and processed in the tool EDICTOR (List 2017).

Mocoví, like its sister languages of the Southern branch, Toba and Pilagá (Fabre 2006), possesses a complex system of verbal inflectional classes, defined by sets of inflectional paradigms (Set I, Set II and Set III). Despite the few attempts at the phonological and morphological reconstruction of Proto-Guaycuruan (Ceria and Sandalo 1995; Viegas Barros 2013), there is a gap in the literature explaining intermediate changes leading to synchronic paradigms. Following principles of internal reconstruction in historical linguistics, I offer a computationally assisted systematic and transparent comparison of Mocoví verb paradigms, corresponding to two different time points: Old Mocoví from the XIX century in Tavolini's (1856) work and Modern Mocoví based on Buckwalter's (Buckwalter 1995) dictionary, complemented by recent grammatical studies (Grondona 1998; Gualdieri 1998; Juárez 2013; 2023).

The comparison of verb paradigms across different verbs reveals the regular sound changes shaping the phonological form of grammatical persons and the paradigmatic structure of inflectional classes. Furthermore, by comparing different stages of the same language, we can accurately identify

retentions and innovations in the paradigmatic structure of verb arguments, e.g. the addition of a glottal stop as a plural marker in Modern Mocoví third person (see Figure 1). Overall, this work offers not only a methodological contribution to explore language-internal evolution but also enhances the synchronic analysis of person paradigms, providing the basis for a refined segmentation of individual person markers and a historical interpretation of idiosyncratic alternations in the modern language.

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