

Lexical and cultural diffusion: a study of fire fans in South America
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In South America, despite demonstrable grammatical convergence that defines several linguistic areas, lexical borrowing is said to be infrequent (e.g. 1-4). This raises the question what factors moderate the rate of lexical borrowing and how the paucity of lexical borrowing is compensated by other processes (e.g. semantic extension) when cultures come in contact. A particularly felicitous domain to investigate these questions is the vocabulary of man-made objects. A comparative ethnographic study of the actual artifacts could determine in which cases they were exchanged. This provides a benchmark against which the linguistic consequences of these exchanges, and their determinants, can be gauged: the aim of this talk. The second goal of this paper is to develop methods for the areal study of linguistic and cultural change. Language contact is studied at regional and continent levels while ethnographic work typically focuses on a single group. The methodological contribution of this talk is to couple continent-wide linguistic comparison to continent-wide study of material culture and show that it is possible to uncover important large-scale cultural and linguistic processes, as well as reveal numerous smaller-scale processes of cultural contact from which areal patterns arise.

To determine what mediates the linguistic outcomes of cultural diffusion and show the importance of coupling linguistics with comparative ethnography, this paper focuses on *fire fans*—tools for fanning cooking fires—and their names in South America. Using museum objects and ethnographic sources, I first made a typology of fire fan models in South America based on their structural and functional features. The results show that fans can be categorized into a small number of models, while mapping them revealed that most of the models are distributed in contiguous geographic areas, within which, given that these areas are inhabited by linguistically unrelated people, the manufacture of particular models must have diffused (Figure 1). Using ethnographic and linguistic methods, in many cases we can also establish the most likely directionality of the diffusion. I intend to show that the linguistic results of the diffusion depend in turn on *affordances*, a vector of the objects' functionality and the users' needs. When the borrowed model does not have new functions *vis-à-vis* the antecedent model to the new users, the linguistic result is the semantic extension of the name for the antecedent model to the inclusion of the borrowed one. By contrast, when the borrowed model has new functions to the new users, the typical linguistic repercussion is lexical borrowing. Particularly interesting are the fans plaited from *Astrocaryum* palms that typically have additional uses related to bitter manioc processing. As fans with new functions, the models were borrowed by numerous bitter manioc horticulturalists in northeastern Amazonia, typically triggering lexical borrowing (Table 1). However, linguistic and ethnographic evidence shows that the same fan model was transplanted from the mouth of the Amazon to the Andean lowlands, an area characterized by the lack of bitter manioc (Figure 1). For the groups inhabiting this area, *Astrocaryum* fans did not afford new (manioc-related) functions and their borrowing triggered instead semantic extension (Table 2). In sum, the results speak to the importance of linking linguistic forms to their real-life referents and their users when analyzing patterns of linguistic and cultural diffusion.

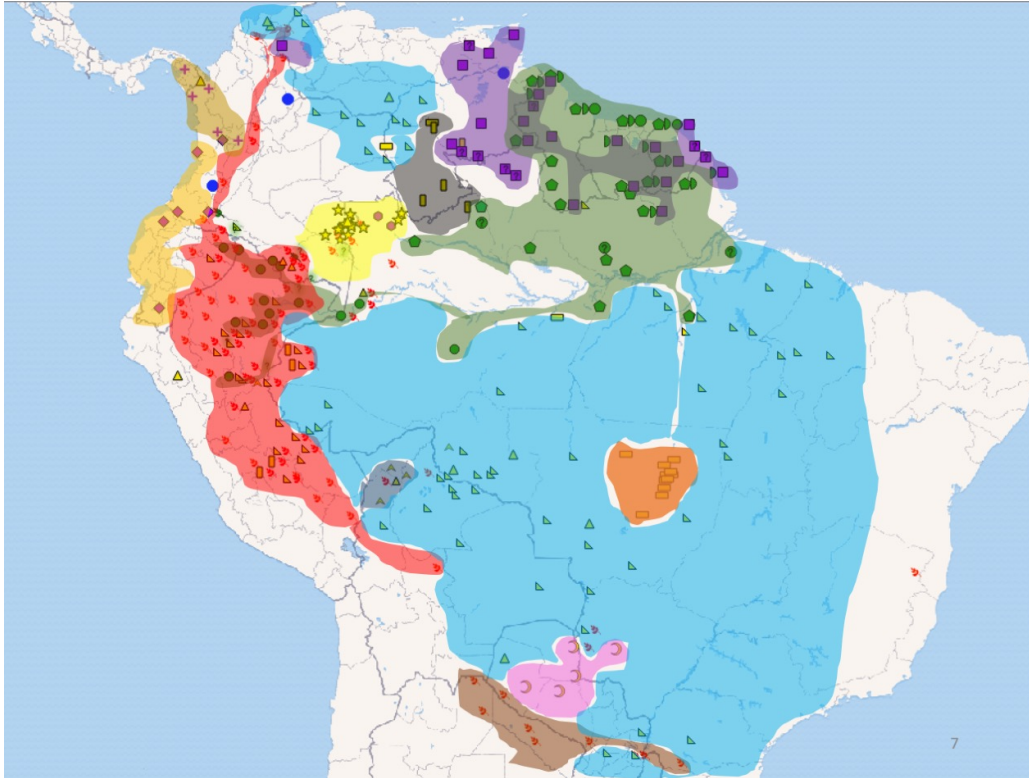


Figure 1. Distribution of fan models in South America. Notice the spread of *Astrocaryum* fans (green) from the mouth of the Amazon to the Upper Amazon, encroaching the distribution of fans made from feathers (red).

Table 1. Lexical borrowing examples: *Astrocaryum* fans borrowed by bitter manioc horticulturalists.

Language	Name, Etymological status
Aruan	<i>malay</i> , borrowing, possibly from Kali'ña <i>marai popuru</i> , a plaiting pattern used in fans
Kukama	<i>marawe</i> , borrowing from Aruan <i>malay</i>
Xiriâna	<i>marawi</i> , borrowing from Proto-Omagua-Kukama <i>marawe</i>)
Paumarí	<i>marawi</i> , borrowing from Proto-Omagua-Kukama <i>marawe</i>)

Table 2. Semantic extension examples: *Astrocaryum* fans borrowed by groups that rely on other crops.

Language	Etymological status
Iquito	<i>apíraati</i> , semantic extension from the name of a mat made from <i>Attalea phalerata</i>
Yameo	<i>nawatě'</i> , semantic extension from the name of a sitting mat made from <i>Attalea phalerata</i>
Yagua	<i>pãäpyëtyu</i> , semantic extension from the name of a feather fan
Urarina	<i>inyaro</i> , semantic extension from the name of a sitting mat made from <i>Attalea phalerata</i>

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