# Tracing social history from synchronic linguistic and ethnographic data: The prehistory of Resígaro contact with Bora

Frank Seifart

#### Abstract

The Amazonian language Resígaro was heavily influenced by the unrelated, neighboring Bora language. Bora influence involves cultural assimilation, some loanwords, and heavy morphological borrowing. What social circumstances lead to this influence? This paper reviews our current knowledge about the cultural and linguistic features that Resígaro borrowed from Bora and interprets these as reflecting a particular social history involving bilingualism and ceremonial exchange.

Keywords: Language contact; Resígaro; Bora; Ethnohistory

# Rastreando historia social a partir de datos sincrónicos lingüísticos y etnográficos: la prehistoria del contacto entre resígaro y bora

#### Resumen

La lengua amazónica resígaro presenta fuertes influencias del bora, lengua vecina con la que no está no relacionada genéticamente. Estas influencias incluyen la asimilación cultural, algunos préstamos léxicos, y numerosos préstamos morfológicos y de estructuras gramaticales. ¿Qué circunstancias sociales condujeron a este tipo de influencias? Este artículo revisa nuestro conocimiento actual acerca de las características culturales y lingüísticas que el resígaro comparte con el bora y las interpreta como un reflejo de una historia social caracterizada por el bilingüismo y el intercambio ceremonial.

Palabras clave: contacto de lenguas; resígaro; bora; etnohistoria

Frank Seifart. Senior Researcher in the Department of Linguistics at the Max Planck Institute for Evolutionary Anthropology in Leipzig and Assistant Professor at the University of Amsterdam. His research interests are linguistic typology, language contact, language documentation, and cross-linguistic corpus linguistics. He has done fieldwork on various North West Amazonian languages, in particular Bora-Miraña and Resígaro. University of Amsterdam. Taalwetenschap. Spuistraat 210. 1012 VT Amsterdam. The Netherlands. Max Planck Institute for Evolutionary Anthropology. Linguistics. Deutscher Platz 6. 04103 Leipzig. Germany. f.c.seifart@uva.nl

# Introduction

A lthough lexical borrowing (Seifart 2011) and morphological borrowing (Aikhenvald 2001: 185–188, 2012, 92–95, Seifart 2011: 17–20, 2012) in Resígaro have been previously described in some detail, the social circumstances of Resígaro contact with Bora remain largely unclear. Previous proposals have ranged from contemporary Resígaro being genealogically related to Bora (Allin 1976, refuted by Payne 1985) to being the result of language obsolescence (Aikhenvald 2012). The current paper adds to this discussion firstly a number of pieces of relevant data, especially ethnographic facts relating to the Resígaros' role in ceremonial exchange systems and an analysis of borrowed vocabulary and calques. Secondly, it offers a holistic discussion of all currently available relevant information with respect to what it might tell us about the prehistoric contact situation. For this purpose, it applies findings from cross-linguistic studies on contact-induced language change to provide models for what kinds of contact situation typically lead to what kinds of contact-induced linguistic change.

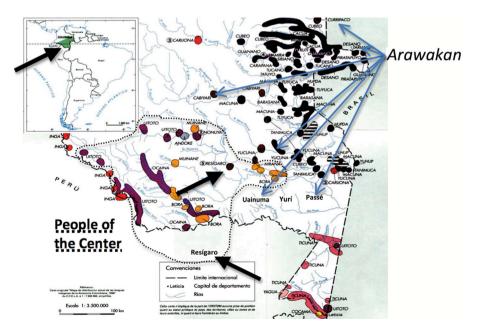
The result is a likely social history of Resígaro contact with Bora that involves that Resígaros were probably newcomers in the area already populated by Boras, experienced a pressure to culturally assimilate, became widely bilingual, but maintained most of their vocabulary to highlight their identity for the purpose of ceremonial exchange.

This adds to our understanding of Amazonian prehistory in general, and to the expansion of Arawakan peoples in particular. It accounts for the assimilation of Resígaro into a multilingual cultural complex, that of the People of the Center, as another example of what appears to be a recurrent Arawakan pattern: Cultural and linguistic assimilation to multilingual cultural complexes have been described for Tariana in the Vaupés (e.g. Aikhenvald 2002, Epps and Stenzel 2013), Waurá and Yawalapití in the Upper Xingú (Seki 1999, Franchetto 2011), Mawayana in a Carib-speaking area (Carlin 2006), Amuesha in the Quechuan sphere (Adelaar 2006), and Machineri, Mojo Trinitario and Ignaciano, Baure, Pareci, Enawê-Nawê in the Guaporé-Mamoré region (Crevels and van der Voort 2008).

The paper is structured as follows. The following section gives a brief introduction to the Resígaro people and language. The third section describes the Resígaros' cultural assimilation to Boras. The fourth and fifth sections review what is known about Bora influence on Resígaro vocabulary and grammar. The sixtth section traces the history of contact between the Resígaro and Bora peoples and the final section concludes this paper.

# The Resígaro language, its known history and current situation

Resígaro is an Arawakan language of the putative "Divisão Japurá-Colômbia" (Ramirez 2001) subgroup within the putative "North-Amazonian" (Aikhenvald 1999) subgroup (Pavne 1985, 1991), along with Yucuna, Cabiyarí, Uainuma, Passé, Kurripako, Tariana (shown in figure 1) and other languages. The documented history of Resigaro only began in the early 20th century, when they were described as a minority group in close contact with Boras, Witotos, and others (Whiffen 1915: 59, 247, Hardenburg 1912: 290, Valcárcel 2004: 37, 61, Gaspar de Pinell 1924: 39). Around that time, Resígaros, like all other indigenous peoples in that area, were brutally exploited for rubber gathering, leading to drastic population decimation and dispersal, and in part deportation to Peruvian territory. Currently, there are only two fully fluent speakers of Resígaro left, who live in an Ocaina community called Nueva Esperanza, on the Yaguasyacu River, in Loreto, Peru. They are bilingual in Ocaina and also know some Bora. The rest of their family has shifted to Ocaina, and more recently also to Spanish. A number of other ethnic Resígaros, who do not speak Resígaro anymore, have become part of Bora communities, i.e. we know that at least some other Resigner familes have shifted to Bora, probably one or two generations ago.



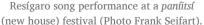
Location of Resígaro (Queixalós and Renault-Lescure 2000; with information from Franco 2012 added).

# Resígaro culture

From the oral history of Resígaros and Boras, as well as earlier sources, especially Whiffen (1915), we know that the Resígaros were traditionally tightly integrated into the multilingual, cultural complex called the "People of the Center" (Echeverri 1997) (encircled in a dotted line in figure 1). A total of seven ethnolinguistic groups belong to this cultural complex, whose territory spans the watershed of the middle Caquetá (Japurá) and Putumayo (Issa) Rivers: Resígaro; the two Boran languages Bora and Muinane; the three Witotoan languages Witoto, Ocaina, and Nonuya; and the isolate language Andoke.

These groups share a number of cultural practices, which set them apart from neighboring groups, such as the people of the Vaupés to the north, and Yagua and Tikuna to the south. Among these practices are the ritual chewing of coca and the licking of tobacco, which is smoked or Wsniffed in other parts of Amazonia (Wilbert 1987). They also share complex systems of ceremonial exchange (Echeverri 1997, Gasché 2009), of which festivals are an important component. Every ethnolinguistic group has repertoires of hundreds of memorized songs that are performed in a predetermined order at these festivals. A typical festival involves groups of invitees from two or more ethnolinguistic groups, who take turns in performing songs in their language within the predetermined scheme. Figure 2 shows a performance in Resígaro at a festival held in a Bora round house in 2005, which was followed by a performance in Bora, shown in figure 3. These figures illustrate the identical setup of the song performances.







Bora song performance at a *paníitsí* (new house) festival (Photo Frank Seifart).

There are about 14 festival types among the People of the Center, shown in table 1 (adapted from Gasché 2009). For each festival type, two or more ethnolinguistic groups have song repertoires, i.e. they may be invitees at such a festival. Invitations to festivals are typically reciprocated, i.e. a former festival organizer will be invited to perform songs with his group at the round house of the former group of invitees. Festivals are therefore an important means of building inter-community social networks. Table 1 shows that Resígaros share at least eight festival types with other groups of the People of the Center (Gasché 2009:39–41). This means that they must have had repertoires of dozens or even hundreds of songs for each of them, even though currently only a few songs for each festival type are remembered, as documented in Seifart (2009).

	Festival type	Resígaro	Bora	Ocaina	Huitoto	Nonuya
1	Dancing beam festival I	allí	llaaríwa	dsayíbica	lladiko	dzayi'bejo'a
2	Dancing beam festival II	dyúíshigú	tóóllíiŧwa	ñijívica	neediko	/
3	New house festival	paníitsí	bahja	juhtóxohxo	sikii, okie	/
4	Festival for a newborn	píshopú	píchojpa	bajováága	marai	/
5	Fruits festival	gotsákaatsjí	ари́јсо	odyááhto	lluaki	jojai
6	Baptism festival	vaánú	pópoóhe	/	okie (?)	/
7	"Turtle" festival	todetóode jaádají	túrií	mañiihta	menisai	mi'iyi
8	"Heron" festival	llóimokáhtó	ihchúba	(jumatso-róóco)	/	/
9	Palmfruit drink festival	(pipíigíbú)	méémeba	(jamíjoru)	/	/
10	"Carijona" festival	(tovohtoó-tsí)	ujcútso	(ñoxohtára)	riai rua	/
11	Round house inaugu- ration	/	/	dyohxáso-xo	erai rua	/
12	"Animal" festival	/	(iámehe)	dyohxáso-xo	/	/
13	Cannibal festival	/	túmajtsi	/	bai	/
14	Peace festival	/	/	ajínhatsa	ifonako	/

Table 1 Festival types of the People of the Center.

Festivals that have names, but no songs in a given language are in parenthesis. "/" indicates that either there are no songs for this festival type in a given language or that its name is not documented.

# Resígaro vocabulary

About 5% of Resígaro vocabulary comprises loanwords from Bora, as identified in Seifart (2011). More than half of these loanwords are 'culturally important' terms (table 2), from ritual and ceremonial contexts (e.g. 'coca', 'mask'), food and food processing (e.g. 'manioc grater', 'palm fruit drink'),

kinship and social groups (e.g. 'grandmother', 'Witoto'), house building and artifact production (especially names of tree species used for house building), and names for animal species that are hunted for food.

CATEGORY	Loanwords
Rituals, cermonies	<i>hibii</i> 'coca', <i>taaβí?é</i> 'a species of tree (yarumo) the leaves of which are mixed with coca', <i>koómó</i> 'signal drum', <i>maání?úmí</i> 'mask', <i>tJé?keú</i> 'rattle'
Food, food proces- sing	tso?βómú 'grated manioc', kásoogú 'manioc grater', mats <sup>h</sup> aákú 'peanut', maa?mú 'manioc bread', mééme?o '(pijuayo) palm fruit drink', ta?akábú 'soursop (Annona muricata) fruit', íímu?ó 'beehive, honeycomb'
Kinship, social groups	munúbé 'brother, husband', munudzé 'wife', taádzé 'grandmother', t <sup>i</sup> a?diío 'grandfather', t <sup>h</sup> o?k <sup>h</sup> umuí 'Witoto', <i>-koomí</i> 'village, group, tribe'
House building, artifact production	<i>haádʒa?é</i> 'yaripa palm tree used for house building', <i>hiímiaaku?é</i> 'hard wood tree used for pillars in house construction', <i>tók<sup>h</sup>ó</i> 'palm species, leaves are used for thatching houses', <i>hoou?é</i> 'cumala tree, used for buil- ding', <i>mínúhigiú</i> 'a shelter', <i>híɲuhui?é</i> 'topa/balsa tree, soft wood used for carving, e.g. masks, bark for making recipients', <i>maání</i> 'pitch, tar'
Game animals	<i>haagú</i> 'partridge', <i>bahí</i> 'stingray', <i>déene?é</i> 'trumpeter bird', <i>ho?bú</i> 'ca- pybara', <i>t<sup>h</sup>iit<sup>h</sup>i?ó</i> 'sumileoncito monkey species', <i>toopáú</i> 'panguana bird'

 Table 2

 Culturally important terms among Bora loanwords in Resígaro

Table 3 gives examples of 'culturally neutral' terms among Bora loanwords in Resígaro, which include terms for non-edible animals, a number of other nouns, and some verbs. Notably, there are few if any basic vocabulary items among the loanwords. For instance, no body part terms have been borrowed.

Table 3 Culturally neutral terms among Bora loanwords in Resigaro

CATEGORY	Loanwords
Non edible animals	dzada?ígúı 'centipede', dzoódúı 'parrot', heété 'fly', k <sup>h</sup> onaa?é 'frog', maaná?o 'iguana', paagáúı 'spider', piímé 'ant species', toodóhí 'cockroach', soβidákó 'lizard species', t <sup>i</sup> ugií?ó 'parakeet species', todokáakıú 'toad species'
Other nouns	kunuhuú 'walking stick', pakó 'water', húneú 'lake', úni 'saliva', bo?otáhí 'plate'
Verbs	<i>bé?dounukumú?</i> 'bathe in blood', <i>heeßé?ií</i> 'measure', <i>kaaháße?i</i> 'flood', <i>kaákusó?i</i> 'take notice, believe', <i>kuhúi?</i> 'signal, indicate', <i>pí?ko</i> 'throw', <i>k<sup>h</sup>oßakó?i</i> 'break up', <i>dʒídʒaá</i> '(be) big'

Examples 1-3 illustrate instances of calques (or loan translations), i.e. Resígaro words that are build from mostly or entirely native material, but on the model of corresponding Bora words. For instance, the Resígaro word for 'wasp' in example 1 literally means 'the one belonging to the wasps' nest', just like in Bora. Examples 2-3 illustrate Resígaro calques formed from native Arawakan stems and classifier suffixes borrowed from Bora (see section 5).

		Resígaro		Bora
(1)	a.	<i>haánimiínáa-gí</i> wasps_nest-MASC.SG 'wasp'	b.	múnúmuúkóe-hpi wasps_nest-MASC.SG 'wasp'
(2)	a.	a?mithoó-tsi <u>-gú</u> eat-NMLZ <u>-CL.PLANK</u> 'scissors'	b.	<i>maht∫ó<u>-g<sup>w</sup>a</u></i> eat. NMLZ <u>-CL.PLANK</u> 'scissors'
(3)	a.	<i>ke?tsoó-tsi<u>-hú</u> teach-NMLZ<u>-CL.WORD</u> 'teaching'</i>	b.	mamáβ <sup>j</sup> e <u>-huu</u> teach.NMLZ <u>-CL.WOR</u> 'teaching'

# Resígaro grammar

Table 2 summarizes which grammatical features of contemporary Resígaro are inherited from its Arawakan ancestral language and which are borrowed from Bora, as identified by Aikhenvald (2001) and Seifart (2011, 2012) through comparison of Resígaro with related Arawakan languages, on the one hand, and Bora with its sister language Muinane, the only language to which Bora has so far been convincingly shown to be related.

Table 4 shows that the grammatical structure of Resígaro is essentially inherited from Arawakan, especially with respect to basic clause structure, involving fixed word order, obligatory expression of objects, case marking, and subject prefixes on verbs, as well as other verbal morphology such as tense-aspect-mood markers. Resígaro also retains unusual phonological distinctions from Arawakan, especially voiceless nasal consonants and a three-way distinction in stop consonants and affricates into aspirated, nonaspirated and voiced.

Table 4
Inherited vs. borrowed grammar (Aikhenvald 2001, Seifart 2011, 2012)

	INHERITED FROM ARAWAKAN	BORROWED FROM BORA
Grammatical structure	<ul><li>fixed word order</li><li>obligatory objects</li></ul>	- formation of nouns, demonstrative pronouns, numerals, etc.
Morphology	<ul> <li>subject/possessor prefixes</li> <li>case markers (except dative)</li> <li>verbal tense-aspect-mood markers</li> <li>plural marker for humans</li> <li>most free pronouns</li> </ul>	<ul> <li>a few dozen classifiers</li> <li>plural and dual markers</li> <li>augmentative</li> <li>dative case with verb 'give'</li> <li>dual free pronouns</li> <li>demonstratives, numerals, etc.</li> </ul>
Phonology	<ul> <li>voiceless nasals</li> <li>aspirated stops and affricates,</li> <li>e.g. k<sup>h</sup> vs. k vs. g</li> </ul>	- phonological tone (?)

However, certain domains of Resígaro grammar are also heavily influenced by Bora, both with respect to the structure and the actual forms of affixes and function words, which are also borrowed. This concerns in particular the formation of count nouns through derivation with classifiers borrowed from Bora, and the formation of demonstrative pronouns, numerals, etc., also with classifiers, as well as further nominal morphology such as number markers. For instance, the noun *híga-bá*, 'trap' in example 4 is derived with the borrowed classifier -bá, and this classifier is then used to form the demonstrative pronoun *té?é-baá-hí* 'these traps' to refer back to this trap (forms borrowed from Bora are underlined in examples 4-7). Similarly, in example 5, the borrowed classifier *-ha* is used to form adjective, also marked with a borrowed augmentative marker. Examples 4 and 6 illustrate that stems forming numerals and demonstrative pronouns are also borrowed, as well as number markers. Example 7 illustrates the use of the only borrowed case marker, dative -ke, which is only used with the verb 'give' (for details on morphological borrowing in Resígaro, see Aikhenvald 2001: 185-188, Aikhenvald 2012: 92–95, Seifart 2011: 17–20, Seifart 2012).

(4) híga<u>-bá</u> pi-k<sup>h</sup>á anɛpú apótsí <u>sá-?osí</u> higa<u>-CL.THING</u> 2SG-make many at\_once <u>one-CL.HAND</u> <u>té?é-baá-hí</u> <u>this-CL.THING-PL</u>

'Of the *hígabá*-trap, you make many at the same time, five (lit. one hand) of these (traps)'

- (5) dzídzáá-há-koba
   big-<u>CL.HOUSE-AUGM</u>
   'a big one (e.g. house)'
- (6)sá-2ábá-kobá-na<br/>one-CL.THING-AUGM-REST(7)no-ké<br/>na-?na-?ijust one big (box, etc.)'1SG-DAT3PL-give<br/>'They gave to me'

# The social history of Resígaro

What socio-historical circumstances have led to the contact influence described above? To answer this question, we look at findings from typological and theoretical research on language contact, developed on the basis of cases of language contact with at least partially known histories. This provides us with indications about what kinds of social circumstances usually lead to what kind of contact-induced changes, and we can interpret Resígaro facts against that background, as summarize in table 5.

The first question is whether Bora influence on Resígaro is the result of borrowing or language shift (in terms of Thomason and Kaufman 1988). In a borrowing scenario, pre-contact Resígaros would have spoken Bora as their second language and borrowed Bora elements into their native language. In a language shift scenario, a group of Bora speakers would have shifted to precontact Resígaro, but did not acquire it natively, retaining elements of their native language, thus creating a new variety of Resígaro influenced by Bora. In a shift scenario, we would thus expect contact-induced changes primarily among features that are difficult to acquire for second language learners, especially complex grammatical structures and pronunciation.

	Synchronic feature	HISTORICAL ORIGIN
1	Complex Arawakan grammar retained	pre-contact Resígaro speakers borrowing from Bora, not Bora speakers shifting to pre-contact Resígaro
2	Heavy grammatical bor- rowing and calques	widespread bilingualism, assimilating structures to alleviate cognitive load
3	Only few loanwords	pressure to maintain linguistic identity, of which (basic) vocabulary is most emblematic
4	Cultural practices and terms borrowed	pressure to assimilate culturally
5	Shared festivals	entire community under Bora influence, not terminal speakers

Table 5 Historical origin of contact influence

Contemporary Resígaro clearly retains a number of complex grammatical features that it inherited from its Arawakan ancestor language and that are distinct from Bora, including complex verbal morphology, fixed word order and unusual phonological distinctions. From this we can relatively safely conclude that contemporary Resígaro did not emerge in a shift scenario (at least not primarily), but in a borrowing scenario, i.e. it was created by native speakers of pre-contact Resígaro who had learned at least some Bora and borrowed Bora elements into their native language. On the other hand, we can also relatively safely exclude that Resígaro would have emerged in a community made up of mostly Resígaro women and mostly Bora men, which might have led to the creation of a particular kind of mixed language, characterized by a sharp divide between mothers' language grammar and fathers' language vocabulary (Matras and Bakker 2003).

What were the socio-historical circumstances like under which pre-contact Resígaro speakers borrowed Bora elements? The heavy grammatical borrowing and calques strongly suggest that there was widespread bilingualism, i.e. many pre-contact Resigaro speakers knew Bora very well and regularly used both languages. We know that in such situations, speakers tend to gradually and unconsciously introduce changes in the grammatical structures of their languages, removing structural differences, to alleviate the processing load afforded by switching back and forth from one grammatical system to another (Gumperz and Wilson 1971; Ross 2007). In an ideal end state of such a process, the grammatical structures of the languages involved are identical, and the languages are only differentiated by different lexical items. Resigaro has not reached that state, but structural convergence towards Bora can clearly be observed, for instance, in the formation of nouns and demonstrative pronouns with classifiers, which follows exactly the same pattern as in Bora. Ross (2007) explicitly argues that convergence in grammatical structures begins with lexical calques, of which examples were given above. Changes were introduced in Resígaro, not Bora, since presumably most Bora speakers were not bilingual in Resígaro and these speakers prevented possible changes according to a Resigaro model from spreading in Bora.

Given the Resígaros' intense contact with Bora and heavy bilingualism, one would expect that Resígaro also borrowed many loanwords from Bora (Thomason and Kaufman 1988). However, a percentage of 5% loanwords, as in Resígaro, is cross-linguistically extremely low. In fact, in a recent survey of loanwords in 41 languages (Tadmor 2009), there is only one language with a lower percentage, namely Mandarin Chinese. This mismatch is indicative of a cultural ideology of avoidance of lexical borrowing. Indeed, maintaining a linguistic identity is essential for taking part in the ceremonial exchange systems of the People of the Center, in which different ethnolinguistic groups exchange performances of songs in their language. This linguistic identity is most clearly signaled by vocabulary, and in particular frequently used basic vocabulary, which consequently has not been borrowed. Grammatical structures and morphological affixes, on the other hand, are less accessible to conscious identification with individual languages and thus can be more easily borrowed without compromising one's linguistic identity (Epps 2006).

From the cultural practices and terms that Resígaro took over from Bora, it is clear that they were eager to participate in the cultural and ceremonial practices of the Bora, for which they developed elaborate sets of songs. They may also have taken over elements of everyday Bora culture such as house building and food processing techniques, together with the words for them. The fact that nouns for local flora and fauna species were also borrowed might indicate that Resígaros migrated from an area where these species did not exist or did not have the same importance or use.

Finally, the current status of Resígaro as a moribund language may be taken to suggest that the observable Bora influence is due to language obsolescence in the course of the 20<sup>th</sup> century, i.e. the a case of typically highly variable speech of the last speakers of a dissolving speech community (Sasse 1992a; 1992b), as Aikhenvald (2012) argues. A number of pieces of evidence speak against this. Firstly, the Resígaro's repertoires of songs must have taken some time to develop and they are tied to the practices of entire speaker communities, not individuals. Secondly, Bora influence is remarkably consistent across all available Resígaro sources, including Resígaro songs, and also wordlists from the early 20th century (Seifart 2011), which document Resígaro at a time when there were still functioning speech communities. Within and across all of these sources, there are also no indications of "exaggerated variation" (Campbell and Muntzel 1989) typical of language obsolescence, certainly not with respect to Bora elements in Resígaro, not even among the two speakers surviving today.

# Conclusion

In conclusion, drawing on findings from typological and theoretical research on language contact, we may interpret synchronically observable features of Resígaro to trace a likely social history of contact between Bora and Resígaro. In a nutshell, Resígaros probably arrived in an area already populated by Boras, they experienced a pressure to culturally assimilate and became widely bilingual in Bora. This lead to heavy grammatical influence, but they maintained most of their vocabulary to highlight their identity for the purpose of ceremonial exchange.

#### Notes

*Abbreviations:* 1 - first person; 2 - second person; 3 - third person; AUGM - augmentative; CL - classifier; DAT - dative; NMLZ - nominalization; PL - plural; REST - restrictive; SG - singular

### References

- ADELAAR, Willem F. H. 2006. "The Quechua Impact in the Amuesha Language, an Arawak Language of the Peruvian Amazon." In Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.) *Grammars in Contact. A Cross-Linguistic Typology*, 290–312. Explorations in Linguistic Typology 4. Oxford: Oxford University Press.
- AIKHENVALD, Alexandra Y. 1999. "The Arawak Language Family." In R. M. W. Dixon and Alexandra Y. Aikhenvald (eds.) *The Amazonian Languages*, 65–106. Cambridge: Cambridge University Press.
  - 2001. "Areal Diffusion, Genetic Inheritance, and Problems of Subgrouping: A North Arawak Case Study." In Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.) *Areal Diffusion and Genetic Inheritance. Problems in Comparative Linguistics*, 167–94. Oxford: Oxford University Press.
  - . 2002. Language Contact in Amazonia. Oxford: Oxford University Press.
- ——. 2012. "Language Contact in Language Obsolescence." In Claudine Chamoreau and Isabelle Léglise (eds.) *Dynamics of Contact-Induced Language Change*, 77–110. Berlin, Boston: De Gruyter Mouton.
- ALLIN, Trevor R. 1976. A Grammar of Resigaro. Horseleys Green: Summer Institute of Linguistics. http://research-repository.st-andrews.ac.uk/handle/10023/1012.
- CAMPBELL, Lyle and Martha C. Muntzel. 1989. "The Structural Consequences of Language Death." In Nancy C. Dorian (eds.) *Investigating Obsolescence. Studies in Language Contraction and Death*, 181–96. Studies in the Social and Cultural Foundations of Language 7. Cambridge: Cambridge University Press.
- CARLIN, Eithne B. 2006. "Feeling the Need. The Borrowing of Cariban Functional Categories into Mawayana (Arawak)." In Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.) *Grammars in Contact. A Cross-Linguistic Typology*, 313–32. Explorations in Linguistic Typology 4. Oxford: Oxford University Press.
- CREVELS, Mily, and Hein VAN DER VOORT. 2008. "The Guaporé-Mamoré Region as a Linguistic Area." In Pieter Muysken (eds.) From Linguistic Areas to Areal Linguistics, 151–79. Studies in Language Companion Series 90. Amsterdam, Philadelphia: John Benjamins.
- ECHEVERRI, Juan Alvaro. 1997. The People of the Center of the World. A Study in Culture, History and Orality in the Colombian Amazon. Ph. D. dissertation. New York: New School for Social Research, Faculty of Political and Social Science.

- EPPS, Patience. 2006. "The Vaupés Melting Pot: Tukanoan Influence on Hup." In R. M. W. Dixon and Alexandra Y. Aikhenvald (eds.) *Grammars in Contact. A Cross-Linguistic Typology*, 267–89. Explorations in Linguistic Typology 4. Oxford: Oxford University Press.
- EPPS, Patience and Kristine STENZEL (eds.) 2013. Upper Rio Negro. Cultural and Linguistic Interaction in Northwestern Amazonia. Rio de Janeiro: Museu do Indio, Funai. www.ppgasmuseu.etc.br/publicacoes/altoxingu.html
- FRANCHETTO, Bruna (ed.) 2011. *Alto Xingu: Uma Sociedade Multilíngue*. Rio de Janeiro: Museu do Indio, Funai. www.ppgasmuseu.etc.br/publicacoes/altoxingu.html
- FRANCO, Roberto. 2012. Cariba malo: episodios de resistencia de un pueblo indígena aislado del Amazonas. Documentos Históricos Imani 2. Leticia: Universidad Nacional de Colombia. www.bdigital.unal.edu.co/6140/3/9789587611618.pdf
- GASCHÉ, Jürg. 2009. "La Sociedad de La 'Gente Del Centro." In Frank Seifart, Doris Fagua, Jürg Gasché and Juan Alvaro Echeverri (eds.) A Multimedia Documentation of the Languages of the People of the Center. Online Publication of Transcribed and Translated Bora, Ocaina, Nonuya, Resígaro, and Witoto Audio and Video Recordings with Linguistic and Ethnographic Annotations and Descriptions. Nijmegen: DOBES-MPI. http://corpus1.mpi.nl/qfs1/media-archive/dobes\_data/Center/Info/ WelcomeToCenterPeople.html.
- GASPAR DE PINELL. 1924. Un viaje por el Putumayo y al Amazonas. Ensayo de navegación. Bogotá: Imprenta Nacional.
- GUMPERZ, John J. and Robert WILSON. 1971. "Convergence and Creolization: A Case from the Indo-Aryan/Dravidian Border in India." In Dell Hymes (ed.) *Pidginization* and Creolization of Languages, 151–67. Cambridge: Cambridge University Press.
- HARDENBURG, W.E. 1912. The Putumayo, the Devil's Paradise : Travels in the Peruvian Amazon Region and an Account of the Atrocities Committed upon the Indians Therein.
   With an Introduction by C. Reginald Enock. Together with Extracts from the Report of Sir Roger Casement Confirming the Occurrences. London: T. Fisher Unwin.
- MATRAS, Yaron and Peter BAKKER (eds.) 2003. *The Mixed Language Debate*. Berlin: Mouton de Gruyter. http://dx.doi.org/10.1515/9783110197242
- PAYNE, David. 1985. "The Genetic Classification of Resigaro." *International Journal of American Linguistics* 51(2): 222–31. http://dx.doi.org/10.1086/465867
  - —. 1991. "A Classification of Maipuran (Arawakan) Languages Based on Shared Lexical Retention." In Desmond C. Derbyshire and Geoffrey K. Pullum (eds.) *Handbook of Amazonian Languages*. Vol. 3, 355–499. Berlin: Mouton de Gruyter.
- QUEIXALÓS, Francisco and Odile RENAULT-LESCURE (eds.) 2000. *As Línguas Amazônicas Hoje*. São Paulo: IRD/ISA/MPEG.
- RAMIREZ, Henri. 2001. *Línguas Arawak Da Amazônia Setentrional: Comparação E Descrição*. Manaus: Editora de Universidade do Amazonas.

- Ross, Malcom. 2007. "Calquing and Metatypy." *Journal of Language Contact* Thema 1: 117–43. http://dx.doi.org/10.1163/00000007792548341
- SASSE, Hans-Jürgen. 1992a. "Language Decay and Contact-Induced Change: Similarities and Differences." In Matthias Brenzinger (ed.) Language Death. Theoretical and Factual Explorations with Special Reference to East Africa, 59–80. Berlin, New York: Mouton de Gruyter. http://dx.doi.org/10.1515/9783110197242

—. 1992b. "Theory of Language Death." In Matthias Brenzinger (eds.) Language Death. Theoretical and Factual Explorations with Special Reference to East Africa, 7–30. Berlin: Mouton de Gruyter. http://dx.doi.org/10.1515/9783110870602.7

- SEIFART, Frank. 2009. "Resigaro documentation." In Frank Seifart, Doris Fagua, Jürg Gasché, and Juan Alvaro Echeverri (eds.) A multimedia documentation of the languages of the People of the Center. Online publication of transcribed and translated Bora, Ocaina, Nonuya, Resigaro, and Witoto audio and video recordings with linguistic and ethnographic annotations and descriptions, Nijmegen: Dobes-MPIP. http://corpus1.mpi.nl/qfs1/ media-archive/dobes\_data/Center/Info/WelcomeToCenterPeople.html
  - —. 2011. Bora loans in Resígaro: Massive morphological and little lexical borrowing in a moribund Arawakan language. Cadernos de Etnolingüística. Série Monografias 2. http://www.etnolinguistica.org/mono:2
  - —. 2012. "The Principle of Morphosyntactic Subsystem Integrity in language contact: Evidence from morphological borrowing in Resígaro (Arawakan)". *Diachronica* 29: 471–504. http://dx.doi.org/10.1075/dia.29.4.03sei
- SEKI, Lucy. 1999. "The Upper Xingu as an Incipient Linguistic Area." In *The Amazonian Languages*, edited by R. M. W. Dixon and Alexandra Y. Aikhenvald, 417–30. Cambridge: Cambridge University Press.
- TADMOR, Uri. 2009. "Loanwords in the World's Languages: Findings and Results." In Martin Haspelmath and Uri Tadmor (eds.) Loanwords in the World's Languages. A Comparative Handbook, 55–75. Berlin: Mouton de Gruyter. http://dx.doi. org/10.1515/9783110218442.55
- THOMASON, Sarah G. and Terrence KAUFMAN. 1988. Language Contact, Creolization, and Genetic Linguistics. Berkeley, CA: University of California Press.
- VALCÁRCEL, Carlos A. 2004. *El proceso del Putumayo y sus secretos inauditos*. Monumenta Amazónica Serie E 1. Iquitos: Ceta.
- WHIFFEN, Thomas. 1915. The North-West Amazons: Notes of Some Months Spent among Cannibal Tribes. London: Constable.
- WILBERT, Johannes. 1987. *Tobacco and Shamanism in South America*. New Haven, London: Yale University Press.

Submission date: 14 January 2015 Acceptance date: 16 February 2015