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**Bora loans in Resígaro:
Massive morphological and
little lexical borrowing in a
moribund Arawakan
language**

by

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List of Abbreviations

The following abbreviations are used in interlinear morpheme glossing. Additional abbreviations used in individual chapters are explained in the chapters where they occur.

1	first person
2	second person
3	third person
ABL	ablative case
CAUS	causative
DL	dual
F	feminine
M	masculine
INST	instrumental case
LOC	locative case
M	masculine
NMZ	nominalization
NON_F	non-feminine
PERF	perfective aspect
PERT	pertaining to
PL	plural
PRED	predicate marker
PURP	purposive
REC	recent past
REM	remote past
REST	restrictive
SG	singular
VBLZ	verbalization

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1. Introduction

1.1. Aims of this study

The first major aim of this study is to analyze morphological borrowing from Bora into Resígaro (Arawakan¹) and the historical development of this borrowing, based on analyses of wordlists from the 1920s, 1930s, and 1970s. It shows that Resígaro borrowed from Bora entire sets of bound grammatical morphemes, including classifiers, number markers, and bound grammatical roots that are used to form numerals, quantifiers, etc., to such an extent that Resígaro almost resembles a mixed language. This massive Bora influence had been observed in data from the speech of the last Resígaro speakers (Aikhenvald 2001:185-188; Seifart 2011), where it might be seen as an instance of exaggerated variation typical for the last speakers of a dissolving speech community (Campbell & Muntzel 1989; Sasse 1992; Tsitsipis 1998). However, the analysis of the older data provided by this study shows that morphological borrowing (like lexical borrowing) has not increased since the 1920s. The analysis of the historical sources thus suggests that the remarkably massive morphological borrowing in contemporary Resígaro was already present when the language was spoken by an entire speech community and is not merely an effect of language death. Phonological evidence additionally suggests that at least some of the borrowing is more than 190 years old.

The second major aim of this study is to settle the question of the extent of lexical borrowing from Bora into Resígaro, which has been estimated to be either about 10% or 25% by previous research. The current study shows that lexical borrowing is confined to around or less than 5%. This can be shown most clearly by an analysis of an extensive 1,590-item wordlist provided by Allin (1976:382-458), and it can be confirmed with the more limited data in two older sources. This finding is also relevant for the evaluation of the massive morphological borrowing, since borrowing of bound grammatical morphemes is predicted to occur only in conjunction with massive lexical borrowing by most approaches to contact-induced language change (see, e.g., Weinreich 1953; Heath 1978:105; Wilkins 1996:111).

An additional aim of this study is to make linguistic resources available for future analyses, in the spirit of Landaburu & Rojas Curieux (1996, 1998, 1999a, 1999b). These resources consist, on the one hand, of one, as of yet, unpublished and inaccessible wordlist from the 1930s (Manuel María de Mataró no date). On the other hand, this study provides comprehensive annotations of this wordlist as well as of two published Resígaro wordlists with respect to elements borrowed from Bora. These annotations include a complete inventory of Bora material found in Allin's 1,590-item wordlist, which consists of more than 120 morpheme types (grammatical and lexical) that are attested in over 400

¹ Some authors (e.g. Aikhenvald 1999; Danielsen 2007; Rose 2010) use the term "Arawak" instead of "Arawakan" to refer to this family. I use the latter term here, following Payne (1991), who established the extent and limits of this family, and who uses the term "Arawakan" in addition to the term "Maipuran", which is not used anymore.

tokens. These data will hopefully also be useful for further comparative analyses of morphological borrowing.

The remainder of this chapter describes the different views in the literature on the relation between Resígaro, Bora, and Arawakan (Section 1.2) and the ethnographic and historical background of Resígaro's contact with Bora (Section 1.3). Chapter 2 describes the three data sources used in this study. Chapter 3 analyzes the Bora elements in the Resígaro varieties that are documented in these three sources, including discussions of lexical borrowing, morphological borrowing, and structural influence. Chapter 4 discusses comparative phonological evidence that suggests that borrowing took place more than 190 years ago. Chapters 5 and 6 contain reproductions of the two wordlists from the early 20th century, with full annotations of correspondences with contemporary Resígaro forms and elements borrowed from Bora. Chapter 7 contains an annotated list of all Resígaro words from Allin's (1976) work that contain Bora material. Chapter 8 concludes this study.

1.2. Resígaro's genealogical affiliation and its relation to Bora

The genealogical affiliation of Resígaro and its relation to Bora have been characterized in drastically different ways in the past. While for Hardenburg (1912:150), Resígaro is "more or less the same" as Huitoto, Tessmann (1930:583) claimed that Resígaro might be linguistically close to Bora ("sprachlich vielleicht in die Nähe der Bora"), without mentioning any relation to the Arawakan family. Neither of these two sources provides any linguistic data. Based on the sources reproduced in the current study, Bartolomé de Igualada & Marcelino de Castellví (1940:93)² and Rivet & Wavrin (1951) have placed Resígaro in the Arawakan family without mentioning a relation to Bora; this is the classification that Loukotka (1968:137) also follows.

Based on data collected in the early 1970s, Allin (1976:2) claimed that "from a comparative study of [his own Resígaro vocabulary with] published vocabularies and grammatical descriptions, it is obvious that Resígaro is related historically to Bora, though the two languages are not at all mutually intelligible. Inasmuch as others affirm that Bora is related to Ocaina and Huitoto, Resígaro must be related to these, too". Since Allin follows previous sources in classifying Resígaro as Arawakan, he concludes that the Witotoan languages³ Bora, Ocaina, and Witoto [Huitoto] proper should be included in the Arawakan family. The claim of a genealogical relationship between Bora and Resígaro is presumably based on the identification of cognate words in the vocabularies, although

² Note that names of Capuchin monks are composed of a religious name followed by the place of their origin and that they are ordered alphabetically by the religious name, following the conventions established by the *Lexicon Cappucinum* (1951). This applies to the names of the following Capuchin monks cited in this study: Bartolomé de Igualada, Gaspar de Pinell, Javier de Barcelona, Manuel María de Mataró, Marcelino de Castellví, Plácido de Calella, and Valentí Serra de Manresa. For all of these names, the second component, which indicates the place of origin, are towns in Catalonia.

³ According to Aschmann (1993), the Witotoan family comprises the Witoto-Ocaina branch and the Bora-Muinane branch. Whether these two branches are genealogically related is still debated (Seifart 2007; Seifart & Echeverri 2010).

Allin does not provide any further analysis or justification of this claim. Partially following Allin, Voegelin & Voegelin (1977) and Ribeiro & Wise (1978:206) classify Resígaro as Witotoan.

Payne (1985) identifies 37 Resígaro words that resemble Bora words in a comparative 375-item wordlist provided by Allin (1976:497-527) and argues that these are borrowings confined to certain lexical domains, such as animal names and cultural terms. He also shows that 57 items from that list, including many basic vocabulary items, are related, by regular phonological correspondences, to forms found in six related Arawakan languages. Payne (1985) also shows that a number of grammatical morphemes of Resígaro, such as cross-referencing prefixes, a privative prefix, and a reflexive prefix, have Arawakan etymologies. Taken together, this provides at last highly convincing evidence that Resígaro belongs to the Arawakan family and is not genealogically related to Bora. The Arawakan affiliation of Resígaro is confirmed by Payne (1991) and Ramírez (2001:396-446), who identify further regular cognates between Resígaro and other Arawakan languages.

The issue of Bora influence on Resígaro is taken up by Aikhenvald (2001:182-190), who identifies heavy restructuring at various levels under Bora influence by comparing Allin's (1976) Resígaro data with that of related Arawakan languages, mainly Tariana and Baniwa, and of Bora (Thiesen 1996; Thiesen & Thiesen 1998). Aikhenvald (2001:185-188) also recognized that Resígaro borrowed many grammatical morphemes from Bora, including pronouns, number markers, and case markers. Additionally, Aikhenvald (2001:182) claims that "lexical comparison of 100 'core vocabulary' and of 218 non-core items between Resígaro and Bora and Witoto shows that about 24% are loans," and, a few lines later Aikhenvald (2001:182) claims that "the lexical percentage between Bora and Resígaro [is] 24-26%"; she does not, however, reveal which data these claims would be based on. With respect to the older data provided by Rivet & Wavrin (1951), Aikhenvald (2001:184) notes that these contain Arawakan forms of the numerals 'one' and 'two', while in Allin's (1976) Resígaro data these were replaced by forms borrowed from Bora.

1.3. Historical and ethnographic background

Ethnographically, Resígaro forms part of a tightly integrated multilingual complex known as the "People of the Center" (Echeverri 1997). Besides Resígaro and Bora, the People of the Center include speakers of five other languages, Muinane, Witoto, Ocaina, Nonuya, and the isolated language Andoke. Their traditional territory was between the Caquetá and Putumayo Rivers in Southeast Colombia. The People of the Center share a number of ethnographic features including the ritual ingestion of pounded coca leaves and tobacco in a liquid form. The latter sets them apart from most other Amazonian peoples, among which tobacco is sniffed or smoked (Wilbert 1987). The groups belonging to the People of the Center have the same ceremonial systems to a large extent, in the context of which they regularly celebrate traditional festivals together (Gasché 2009). For each of the approximately five shared festival types, repertoires of hundreds of songs that are sung in

a predetermined order exist for each language. Important myths, e.g. about shared cultural heroes, exist in each of the languages. Extensive intermarriage and multilingualism were most probably aspects of the relationship between Resígaros and Boras; this is possibly to a lesser extent also true for the other linguistic groups mentioned above. Intermarriage and multilingualism involving Resígaros is less clearly observable today because of language endangerment and cultural change, as discussed below.

Early sources also confirm the close relation between Resígaros and other members of the People of the Center, in particular with Boras. Whiffen (1915) describes various ethnographic features of Resígaro and of neighboring groups such as Witotos, Boras [which he calls Boro], Nonuyas, Ocainas, and Yukunas. Almost all of the features attributed to Resígaros are shared with Boras, some of them exclusively with Boras. For instance, he notes that “the Boro and Resígaro also intermarry—at least cases of such marriages are known” (61); and that “Boro and Resígaro, both relatively light-skinned groups, have thin lips” (274); and also that Resígaros “all depilate”, like Boras and others (282). He also notes that Resígaros, like Boras and Andokes, were “undisputably cannibals” (120). And he notes that “Boro and Resígaro [...] rub themselves with sand [for washing]” (277) and that “a Resígaro chief also [like a Bora chief] made himself notorious by collecting a body of warriors to make war not on the white men but on those Indians who gave way to the pressure upon them by these whites and agreed to work rubber” (63-64). Finally, he notes that “boring the algæ is peculiar to the Boro-speaking group of tribes, and to the Resígaro” (86).⁴

Demographically, Resígaros seem to have been a minority group when compared to Boras and other neighboring groups already in the early 20th century. Whiffen (1915:59, 247) estimates their number in 1909 at 1,000 and estimates that there were 15,000 Boras, 15,000 Witotos, 2,000 Ocainas, 2,000 Muinanes, 1,000 Nonuyas, and 10,000 Andokes, although he notes that these figures are probably too high. Hardenburg (1912:290), citing a report by Roger Casement, states that Resígaros formed a minority group when compared to the more numerous Boras and other more numerous neighboring tribes, such as the Witoto. This is confirmed in a report originally published in 1915 (Valcárcel 2004:37, 61). In 1917 Gaspar de Pinell (1924:39) met about 50 Resígaros near the Putumayo River, in a group of about 6,200 indigenous people, including Witotos, Boras, Andokes, Okainas, and Muinanes, of which the Witoto were the most numerous.

Bartolomé de Iguialada & Marcelino de Castellví (1940:93) estimate the total number of Resígaros in the late 1930s at 10 individuals that were dispersed in various locations across the Caquetá-Putumayo area, including the headwaters of the Pamá River, the mouth of the Metá River, and the settlements of Sabana on the upper Cahuinari River, and El Encanto on the lower Caraparaná River.

The drastic demographic decline of the Resígaros is due to the brutal practices of the infamous Peruvian rubber trading company *Casa Arana*, which started intruding on the People of the Center’s traditional territory in the late 19th century and enslaved and exploited the local indigenous population as a work force for rubber tapping. This resulted in drastic depopulation and disruption of cultural traditions. When in the early

⁴ It is not clear what “algæ” refers to, probably a body part that was traditionally pierced, maybe the earlobe or the lower lip.

1930s the Colombian government reclaimed the territories to the North of the Putumayo River, the *Casa Arana* relocated their indigenous work force, including Witotos, Ocaina, Boras, and Resígaros, to Peruvian territory to the south of the Putumayo River. While Resígaro is most likely extinct in Colombia today, two members of one family, a brother and a sister who live in the Ocaina community *Nueva Esperanza* on the Ampiyacu River in Peru still speak it today. Members of this family were the main consultants for both Allin (1976) and Seifart (2009). Somewhat unusual for traditional Resígaro (according to members of this family) is that the late mother of these two had married into an Ocaina community, of which this family is now part. Accordingly, these Resígaros are bilingual in Ocaina, rather than in Bora. This is an additional argument for considering that the Bora influence in their variety of Resígaros, as described by Aikhenvald (2001:182-190) and Seifart (2011), based on data from Allin (1976) and Seifart (2009), respectively, was not introduced by these two speakers. Rather, contact-induced changes must have happened at least a number of generations ago, when a Resígaro speech community existed that was bilingual in Bora.

In sum, ethnographic facts and some historical documents indicate that Resígaros had been in close contact with Boras for some time before a forced development leading to language endangerment commenced in the early 20th century, as a result of which only two native speakers are alive today.

2. Resígaro sources from the 1920s, 1930s, and 1970s

2.1. A wordlist from the late 1920s collected by Robert de Wavrin

The oldest linguistic data on Resígaro is a wordlist published by Rivet & Wavrin (1951:211-220); it was collected by Robert de Wavrin, a Belgian Marquis, who undertook various expeditions to South America in the first half of the 20th century. Wavrin wrote a number of popular books about his travels and also produced a movie. On his various trips he collected wordlists from a number of indigenous groups, which Paul Rivet analyzed and published. The Resígaro wordlist was probably collected on his trip to South America from 1926 to 1930, but it is unclear where exactly he collected it. It follows the *Instructions d'enquête linguistiques* of the *Institut d'Ethnologie de l'Université de Paris* (Cohen 1928) in terms of the lexical items and the phrases for which Resígaro translation equivalents are provided, as well as the transcription system.

Loukotka (1968:137) mentions an additional manuscript by Robert de Wavrin (Wavrin no date) entitled “Resigaros, eux dissent Rrahanihin”, which is apparently in the archive of Paul Rivet; it is safe to assume that this document contains the data that was published and analyzed in Rivet & Wavrin (1951) for two reasons. First, they mention that the Resígaros’ autodenomination is “*r̂ā(h)panihīn*” (Rivet & Wavrin 1951:204) (*daápemiíu* in contemporary Resígaro), and second, they do not mention the existence of any other sources on Resígaro by de Wavrin.

The entire wordlist is reproduced in Chapter 5. It contains about 293 headwords and a number of subentries containing phrases illustrating the use of the headword in sentence frames, past tense forms, and the like. The Resígaro material given by Rivet & Wavrin (1951) is graphically represented as closely as possible to the original publication, i.e. no attempt is made to regularize Rivet & Wavrin’s (1951) transcription. Further information given in Chapter 5 includes annotations added by me, including numeral references to the entries, English translations of the French glosses, a summary of how the items compare to contemporary Resígaro data, contemporary Resígaro forms, and additional commentaries.

This annotation identifies all Bora material found in this wordlist, and it provides corresponding contemporary Resígaro words, taken from Allin (1976), for these entries in addition to further commentary on Resígaro and Bora where necessary.

2.2. Three wordlists from the 1930s collected by Javier de Barcelona and Plácido de Calella

Starting in the late 19th century, the Catalan Capuchin mission was in charge of the Colombian Amazon region. They established their headquarter in Sibundoy, in the foothills of the Andes. There, Marcelino de Castellví, who became a renown Amerindianist (see, for instance, Marcelino de Castellví 1938, Marcelino de Castellví 1953; Marcelino de Castellví & Espinosa Pérez 1958), set up the *Centro de*

Investigaciones Lingüísticas y Etnográficas de la Amazonía Colombiana (CILEAC) and coordinated an impressive amount of linguistic and ethnographic research carried out by Capuchin monks in the Colombian Amazon region (in addition to missionary work), especially in the 1930s (see Marcelino de Castellví 1934; Bartolomé de Igualeda & Marcelino de Castellví 1940). Marcelino de Castellví was in contact with Paul Rivet and promoted the use of the transcription conventions and elicitation scheme of the *Institut d'Ethnologie de l'Université de Paris* by Cohen (1928) (Marcelino de Castellví 1938:226-227). Marcelino de Castellví adapted this questionnaire to the local conditions (Marcelino de Castellví & Espinosa Pérez 1958:15-100).

In this context, Plácido de Calella (1936) and Javier de Barcelona (1938) collected wordlists on Resígaro. According to Marcelino de Castellví & Espinosa Pérez (1958:247), Plácido de Calella collected his data in 1936 in La Chorrera, and Javier de Barcelona's data was collected later and are "more extensive and accurate". According to the same source, these latter data were collected at "Sabana de Cahinari", an indigenous settlement on the upper Cahuinari River.

These wordlists are mentioned in Bartolomé de Igualeda (1940:70). However, they do not seem to have ever been analyzed further, except by Marcelino de Castellví and his associates, who apparently used them for their classification of Resígaro as Arawakan (Bartolomé de Igualeda & Marcelino de Castellví 1940:93; Marcelino de Castellví & Espinosa Pérez 1958:247; see also Rivet & Wavrin 1951:204). Rivet did not have access to these data (Rivet & Wavrin 1951:204). Marcelino de Castellví in turn did not seem to have had access to the data collected by de Wavrin (Marcelino de Castellví & Espinosa Pérez 1958:247). Loukotka (1968:137) mentions the wordlist by Plácido de Calella (1936), as well as that by Wavrin (non dated, see above), but not the wordlist by Javier de Barcelona (1938). It is unlikely that Loukotka had access to these data, the only Resígaro data he cites are from (Rivet & Wavrin 1951:204). Echeverri (1992:163) also mentions the wordlist by Plácido de Calella (1936) without having had access to it.

One wordlist by Plácido de Calella and two by Javier de Barcelona were combined, ordered alphabetically, and typed up by Manuel María de Mataró (no date), another Catalan Capuchin monk, in an undated document. A carbon copy of that document is held at the *Arxiu Provincial dels Caputxins de Catalunya*, in Sarrià, Barcelona. Photographs of this document are in the appendix of this study.

The transcription in these lists generally follows Cohen (1928) and Marcelino de Castellví & Espinosa Pérez (1958:25-65), although parts of the transcription are apparently Spanish-based, contrary to the general recommendations given in the manuals cited above, but in accordance with Marcelino de Castellví & Espinosa Pérez (1958:55-57), e.g. ⟨gua⟩ in item 6, and ⟨j⟩ for [h] in item 1.

The wordlists are reproduced as closely as possible to the original document by Manuel María de Mataró in Chapter 6. These wordlists cover a total of about 119 headwords, many of which contain attestations from two or three of the original wordlists, and a number of subentries, which have, for example, phrases illustrating the use of the headword in a sentence frame, past tense forms, etc. The Resígaro material given by Manuel María de Mataró (no date) is graphically represented as closely as possible to the original publication, including somewhat peculiar transcription

conventions involving raised letters. No attempt has been made to regularize this transcription. These data are further annotated in Chapter 6 by numeral references to entries, English translations of the Spanish glosses, corresponding contemporary Resígaro forms, and additional commentaries.

As with Rivet & Wavrin's (1951) data, the annotation of Manuel María de Mataró's (no date) data identifies all Bora material found in this wordlist, and it provides corresponding contemporary Resígaro words, taken from Allin (1976), for these entries, in addition to further commentary on Resígaro and Bora where necessary.

2.3. A wordlist from the early 1970s collected by Trevor R. Allin

As an appendix to his doctoral dissertation, a grammar of Resígaro written in the tagmemic framework, Allin (1976) provides extensive lexical data on Resígaro, including a Resígaro-Spanish-English wordlist of about 1,590-items (Allin 1976:382-458). These data were collected during his fieldwork in the early 1970s in the Ampiyacu River region in Northeast Peru. They are highly consistent with data collected between 2003 and 2009 (Seifart 2009), as shown, for instance, by elicitation of items from this wordlist from Resígaro speakers (Seifart, Andrade & Andrade 2008). This is not surprising, since Allin's main consultant, Pablo Andrade, was also one of the main contributors to Seifart (2009), together with his sister Rosa Andrade and their late Mother Alicia Ocagane.

Chapter 7 contains a list of the more than 400 items from Allin (1976:382-458) that include material borrowed from Bora. The columns "Resígaro" and "English" are taken from Allin (1976:382-458). The Resígaro data were transliterated to IPA symbols by me. Annotations added by me include a numerical reference and indications of page numbers referring to Allin (1976) in order to facilitate the location of the forms in that source. The column "Bora source form" gives the Bora form that corresponds to part of the Resígaro form. Bora source forms are taken from the comprehensive and very reliable Bora dictionary (Thiesen & Thiesen 1998). These Bora forms, too, were transliterated to IPA symbols. In both cases, transliteration posed no major problem because the orthographic representations in these sources are highly consistent. For both Resígaro and Bora, long vowels are represented by two identical vowels to avoid complications resulting from the analysis of vowel quantity.

The parts of Allin's (1976) wordlist that are not reproduced here (i.e. all words that do not contain material borrowed from Bora) can be easily consulted, as Allin's (1976) dissertation is permanently available online free of charge (see references). The Bora dictionary (Thiesen & Thiesen 1998) is also permanently available online free of charge (see references).

3. Bora influence on Resígaro

The following sections first describe the regular phonological correspondences between Bora loans in Resígaro and their Bora source forms (Section 3.1) as necessary background to the analysis of borrowed lexical material (Section 3.2) and borrowed bound grammatical morphemes (Section 3.3). Section 3.4 discusses structural influence from Bora on Resígaro that does not involve the transfer of morphological material.

3.1. Phonological nativization of Bora loans

Bora loans are phonologically nativized in Resígaro by a set of highly regular processes, which are summarized in Table 1. These rules help to distinguish Bora loans in Resígaro from Bora and Resígaro forms that resemble each other by chance (examples are discussed in Section 3.2).

	Bora	Resígaro
Vowels	/i/	/i/
	/a/	/u/ (end of phrase) ~ /a/ (elsewhere) (a general phonological rule of Resígaro)
	voiceless plosives and affricates	voiceless non-aspirated plosives and affricates
Consonants	/g ^w /	/g/
	/r/	/d/
	/ts/	/s/ (~ /ts/)
	/hC/	/C/
Combinations	/V?C/ (e.g. /a?ba/)	/V?VC/ (e.g. /a?aba/)

TABLE 1: PHONOLOGICAL NATIVIZATION OF BORA LOANS

Note also in this context that Resígaro has a three-way distinction in stops and affricates (voiced-voiceless-aspirated). Note also that Resígaro has a voiced-voiceless distinction in nasals. These sounds are not consistently recognized in the data from Rivet & Wavrin (1951) and Manuel María de Mataró (no date).

Phonological nativization is further discussed in Chapter 4, as it plays a role in the comparative evidence for the time depth of borrowing.

3.2. Lexical borrowing

Wavrin's 1920s list (Rivet & Wavrin 1951) of about 293 headwords contains 13 lexical roots that are certainly borrowed from Bora and one uncertain form. All these are given in Table 2 in the modern Resígaro transcription. Note that two of these 13 borrowed forms, *tubó-kó* 'arrow' and *níkehé-hú* 'tomb', are not attested in this form in contemporary Resígaro (i.e. in Allin 1976; and Seifart 2009), where native Arawakan words are used instead for these concepts.

In Manuel María de Mataró’s (no date) 1930s list of about 119 words, there are four lexical roots borrowed from Bora (Table 3). One of them, *tubó-kó* ‘arrow’, is the one just noted in the 1920s data—it is a form that is not attested in this form in contemporary Resígaro (i.e. in Allin 1976; and Seifart 2009), where native Arawakan words are used instead for these concepts.

Resígaro (in modern transcription)	English gloss	root type	item number in Rivet & Wavrin’s list	item number in Allin’s list
<i>íimui-ʔó</i>	beehive, honeycomb (sweet-CL:OBLONG)	noun root	1	226
<i>núúhi-gá</i>	hut (shelter-CL:PLANK)	noun root	2	348
<i>mats^haáku</i>	peanut	noun root	14	377
<i>oba</i>	capybara	noun root	44	365
<i>maání</i>	resin	noun root	62	346
<i>húne-ú</i>	lake (lake-CL:ROUND)	noun root	168	332
<i>heété</i>	fly	noun root	208	360
<i>maaʔmú</i>	casabe manioc bread	noun root	234	345
<i>taádze</i>	grandmother	noun root	296	383
<i>níkehé-hú</i>	tomb (?-CL:TUBE)	noun root	305	not attested in Allin (1976), but regular correspondence to Bora source form
<i>múʔa</i>	first person exclusive	pronoun	219	283
<i>tubó-kó</i>	arrow (shoot- CL:POINTED)	noun/verb root	164	not attested in Allin (1976), but regular correspondence to Bora source form, see also Allin’s item 49
<i>(kásoo-gú)</i>	grater (grate- CL:PLANK)	noun/verb root	(269)	343
<i>ekeʔ</i>	grab	verb root	262	not attested in Allin (1976), but multiple attestations in Seifart (2009)

TABLE 2: BORROWED LEXICAL ROOTS IN THE 1920S DATA

Another lexical root borrowed from Bora in this list, *amo-* ‘fish’, is a particularly interesting case for various reasons. First, the 1920s data in Rivet & Wavrin (1951) contains a different term for ‘fish’, *nodē(h)efmá* (in Rivet & Wavrin’s transcription). This form is not related to the two forms for fish reconstructed in Arawakan by Payne (1991:404), **kopaki* and **hima*, or forms in other more or less closely related Arawakan languages of the same region, nor is it related to terms for different local species of fish (Ramirez 2001:407, 439, 725-733). Interestingly, the corresponding Bora form *ámoobe* has no cognate in Bora’s sister language Muinane (Aschmann 1993:139; Walton, Walton & Pakky de Buenaventura 1997).

Resígaro (in modern transcription)	English gloss	root type	item number in Manuel María de Mataró's list	item number in Allin's list
<i>amo-</i>	fish	noun root	106	355
<i>maaʔmú</i>	casabe manioc bread	noun root	25	345
<i>tubó-kó</i>	arrow (shoot- CL:POINTED)	noun/verb root	54	not attested in Allin (1976), but regular correspondence to Bora source form, see also Allin's item 49
<i>ekeʔ</i>	grab	verb root	134	not attested in Allin (1976), but multiple attestations in Seifart (2009)

TABLE 3: BORROWED LEXICAL ROOTS IN THE 1930S DATA

There is thus no strong evidence for the direction of borrowing in this case (but see Aikhenvald 2001:184), although one may assume that it is more likely that this term followed the same pattern as all the other shared forms, rather than being the only instance of an opposite direction of borrowing, i.e. a case of lexical borrowing from Resígaro into Bora. Another interesting point to note about this form is that it appears as a bare root, *ámo-*, in Manuel María de Mataró's (no date) 1930s data, while in contemporary Resígaro this root is bound and must always be followed by a third person non-feminine gender marker, *-gi*, a native Arawakan form (see item 355, Chapter 7). This modern form is exceptional for being composed of a borrowed root and a native suffix. As such it is the mirror image of the dozens of nouns that are composed of native Arawakan roots and classifier suffixes borrowed from Bora.

In Allin's list of about 1,590 Resígaro words, compiled in the early 1970s, there are between 61 and 67 stems that are borrowed from Bora. These figures include lexical stems (noun, verb, and adjective stems) as well as bound grammatical roots that form, for instance, numerals and question words. These latter forms are further discussed in Section 3.3. The entire list of borrowed stems with their Bora source forms are given in Chapter 7, where they are ordered according to morpheme type. Therefore, there is no need to repeat them here. The set of borrowed lexical roots consists of 10-12 culturally important terms (including some culturally important plants), 20-21 terms for local animal species, 6-7 terms for local flora (excluding those listed as culturally important plants), 5 nouns with human referents (including 4 kinship terms), 6-7 other noun stems, one adjective stem, one pronoun stem, and 7-8 verb stems.

As noted above, two Bora loans in the older sources are given as native Arawakan terms in Allin (1976). On the other hand, a few Bora loans in Allin's 1970s list appear as native Arawakan terms in the older sources, for instance Rivet & Wavrin's item 15, *hēhe(i)n(h)í* (their transcription) 'spider', which probably corresponds to Arawakan **heen(u)í* (Ramirez 2001:630), while in Allin's list (item 366 in Chapter 7) a form borrowed from Bora, *paagátú* appears. Particularly notable in this respect are the lower numerals. In both Rivet & Wavrin's data and Manuel María de Mataró's data native Arawakan forms for the numerals 'one' and 'two' appear (see items 333-339 in Chapter 5

and items 150-154 in Chapter 6). These are almost certainly reflexes of Proto-Arawakan **ba* ‘one’ and **yama* ‘two’ (Payne 1991:414, 426; see also Ramirez 2001:669, 763). The forms of numerals in Allin’s data (items 322-325 in Chapter 7), on the other hand, are clearly borrowed from Bora. However, the root for ‘one’ borrowed from Bora, *sa-*, is also already attested in Rivet & Wavrin’s and Manuel María de Mataró’s data. It appears in these data in combination with classifiers, forming complex forms like *sa-nuba* (one-CL:MONTH) ‘one month’ (Rivet & Wavrin’s item 203). The root of the numeral ‘two’ that is borrowed from Bora, *mi-*, is already attested in Manuel María de Mataró’s data (item 70 in Chapter 6). Rivet & Wavrin’s term for ‘second’ (item 337) might also contain material that may correspond to the Bora numeral ‘two’.

Table 4 summarizes the percentages of loanwords found in the three sources analyzed here. For each of the three sources, these figures include the lexical roots discussed above, as well as bound grammatical roots, but not suffixes (see next section for examples and discussion).

	1920s data	1930s data	1970s (and today)
number of headwords	293	119	1,590
number of borrowed roots	16-19	7-8	62-70
percentage of loanwords	5.5-6.5%	5.9-6.7%	3.9-4.4%

TABLE 4: BORA LOANWORDS IN RESÍGARO IN THE 1920S, 1930S, AND 1970S

The percentage of loanwords is thus roughly consistent in the three sources. The raw percentage, in fact, has decreased slightly since the 1920s. It could be argued that the overall percentage of loanwords may actually have decreased also because the considerably larger list from the 1970s contains a lot of non-basic vocabulary such as terms for local flora and fauna. These kinds of terms are cross-linguistically known to be more easily borrowed than the core vocabulary documented in the shorter, older lists (Tadmor 2009). In any case, in terms of lexical borrowing, Resígaro as it is spoken today, i.e. a moribund language with just two speakers left, shows no increase in Bora influence when compared to the oldest available sources.

Before closing this section, we need to briefly comment on Payne’s (1985:223) identification of 37 forms in Resígaro that “seem sufficiently similar” to Bora in a list of 375 items from Allin (1976), a subset of the 1,590-item wordlist used here. If these were all loans, as Payne (1985) suggests, this would amount to about 10% lexical borrowing. There are two reasons why Payne (1985) counted more loanwords than I have. First, some of these forms are similar just by chance, and morphological analysis can help reveal that in some cases. For instance, Resígaro *-βáφoʔóótsi* ‘lung’ is morphologically complex and formed from *-βáφo* ‘interior, inside, stomach’. Payne (1985) treats it as a loan from Bora *βaʔβá-gʷa* ‘lung’. However, the Bora form is composed of a stem that is used exclusively for ‘lung’ and a classifier for plank-shaped objects. For this pair of lookalikes, and for a number of others mentioned by Payne (1985), the regular correspondences of phonological nativization (see Section 3.1) do not apply. The second reason is that a number of other forms given by Payne (1985:223) are composed of bound grammatical roots and classifiers, for instance *teé-ʔi* (this-CL:RIVER) ‘river’ and *té-bake* (this-CL:ROOT) ‘root’. Forms such as these two are counted in the current study as one

borrowed grammatical root (i.e. one loanword) and two borrowed classifiers, i.e. two instances of morphological borrowing (see next section).

3.3. Morphological borrowing

All three sources document massive morphological borrowing, i.e. borrowing of bound grammatical morphemes from closed classes. The current section shows, on the one hand, the remarkable extent of morphological borrowing in Resígaro. This analysis complements Seifart (2011), which studies morphological borrowing in a corpus of texts, where the grammatical function, e.g. agreement marking, can be more fully observed than in the lexical data considered here. On the other hand, this section shows that morphological borrowing from Bora into Resígaro goes back to the early 20th century, i.e. is not a recent innovation by the last speakers.

Tables 5 and 6 summarize all bound grammatical morphemes of a Bora origin that are found in Rivet & Wavrin's (1951) data from the 1920s and Manuel María de Mataró's (no date) data from the 1930s.

form	gloss	morpheme type	attested in item(s)
<i>pa-</i>	all, complete	bound gram. root	68, 306, 340, 341
<i>sa-</i>	one	bound gram. root	203
<i>te-</i>	that	bound gram. root	124, 204
<i>(pe-)</i>	possessive	bound gram. root	(257)
<i>(mí-)</i>	two	bound gram. root	(337)
<i>-bahur</i>	CL:BUSH	classifier	124
<i>-bú</i>	CL:LOG, DRINK, ETC.	classifier	24, 58, 260, (277)
<i>-gahur</i>	CL:PROTURBERATION	classifier	204
<i>-gu</i>	CL:PLANK	classifier	2, (17), 71, 86, (332), (269)
<i>-hi</i>	CL:DISC	classifier	60, 299
<i>-hur</i>	CL:TUBE, WORD, ETC.	classifier	141, 305
<i>-ko</i>	CL:POINTED	classifier	(115), 164
<i>-u</i>	CL:ROUND	classifier	132, (140), 250, 222, (301), (319)
<i>-osi</i>	CL:HAND	classifier	340, 341
<i>-pako</i>	CL:LIQUID	classifier	201
<i>-pásí</i>	CL:RING	classifier	68
<i>-?ehur</i>	CL:HOLE	classifier	293, (294)
<i>-?i</i>	CL:RIVER	classifier	250
<i>-?o</i>	CL:OBLONG	classifier	1, (246), 255
<i>(-nuba)</i>	CL:MONTH	classifier	(203)
<i>-pidze</i>	FEMININE	gender marker	(119), (120), 324
<i>-hi</i>	PLURAL (INANIMATE)	number marker	68, (250)
<i>-ku</i>	DUAL (INANIMATE)	number marker	300, 340, (337)
<i>-?a</i>	PLURAL (HUMAN)	number marker	306, 331

TABLE 5: MORPHOLOGICAL BORROWING IN THE 1920S DATA

form	gloss	morpheme type	attested in item(s)
<i>pa-</i>	all, complete	bound gram. root	33, (92), 132, 158
<i>sa-</i>	one	bound gram. root	155, 156
<i>mi-</i>	two	bound gram. root	70
<i>(si-)</i>	other	bound gram. root	(47)
<i>-gahu</i>	CL:PROTURBERATION	classifier	26
<i>-hi</i>	CL:DISC	classifier	30, 42
<i>-ósi</i>	CL:HAND	classifier	79,
<i>-ú</i>	CL:ROUND	classifier	96
<i>-i</i>	CL:STICK	classifier	112
<i>-gú</i>	CL:PLANK	classifier	38
<i>-mi?o</i>	CL:SHELL	classifier	100
<i>-pidʒe</i>	F.SG	gender marker	46, 70
<i>(-hi)</i>	PLURAL (INANIMATE)	number marker	(42)
<i>-ku</i>	DUAL (INANIMATE)	number marker	70, 158
<i>-ʔa</i>	PLURAL (HUMAN)	number marker	33, (92), 132
<i>(-kuba)</i>	CL:LEG/leg	classifier, noun root	(96)

TABLE 6: MORPHOLOGICAL BORROWING IN THE 1930S DATA

They are basically of three kinds: The first are bound grammatical roots that are used to form quantifiers, pronominal forms, and numerals. The second are classifiers and gender markers that combine with these and with nouns. The third kind are number markers. Instances that cannot be securely identified as being borrowed are given in brackets (see further comments in Chapters 5 and 6). In Tables 5 and 6, Resígaro data are given in the forms that correspond to modern Resígaro pronunciation, in phonological transcription, not in the form given in the original data.

There are various instances where Bora bound morphology appears in contemporary Resígaro but is not present, or not recognizable, in the older data. For example, Rivet & Wavrin's *nōō-tset* 'arrow' (item 122, their transcription) corresponds to contemporary Resígaro *noótsí-gú* (arrow-CL:PLANK), which includes a classifier borrowed from Bora. On the other hand, there are terms for which bound grammatical morphemes are attested in the older data, but not in the newer data, for instance in *ʃakoo?gí-bú* (banana-CL:DRINK) 'banana drink' (Rivet & Wavrin's item 24).

Allin's (1976) data from the early 1970s contains numerous instances of the three types of bound grammatical morphemes that are found in the two older sources. Of the first type, bound grammatical roots, there are eight. These are given in Table 7, with one example each (see Chapter 7 for more examples). An additional bound grammatical root borrowed from Bora is *he?e-*, a root forming distal demonstratives. It is explicitly mentioned in Allin's (1976:199) treatment of demonstrative pronouns, but it does not appear in Allin's (1976:382-458) wordlist, on which counts given in this chapter are based.

form	gloss	example	attested in item(s)
<i>ke-</i>	interrogative pronoun root	<i>képekó</i> ‘which day?’	297
<i>hi-</i>	proximate demonstrative	<i>hihi</i> ‘this (earth, etc.)’	296
<i>mi-</i>	numeral two	<i>migaakú</i> ‘two (planks, etc.)’	298-299
<i>-ne</i>	possessive pronoun root	<i>piiʔné</i> ‘yours’	300-301
<i>pa-</i>	all, complete	<i>pakoomíβá</i> ‘all the village’	302-308
<i>te-</i>	this	<i>tebake</i> ‘root’	309-321
<i>sa-</i>	numeral one	<i>sagw</i> ‘one (planks, etc.)’	322-325
<i>si-</i>	other	<i>siígí</i> ‘alien, foreign to’	326-328

TABLE 7: BORROWED BOUND GRAMMATICAL ROOTS IN ALLIN’S (1976) DATA

There are 48 morphemes of the second type, i.e. classifiers and gender markers, in Allin’s data, instantiated in a total of 267 tokens, i.e. 267 words that include classifier or gender markers borrowed from Bora. These are 47 classifiers, which are used predominantly with inanimate nouns, and one feminine singular gender marker. Since the data in Chapter 7 are ordered according to morpheme type, these borrowed classifiers are easy to find there and are not listed separately here. Of the third type, number markers, there are seven in Allin’s data (Table 8). There are only a few examples of number markers in the data in Chapter 7, below, because those data contain almost exclusively headwords from Allin’s (1976) wordlist, and these are usually in the singular. But Allin’s (1976:382-458) wordlist additionally contains many dual and plural forms given as subentries, for instance *adzápoo-kú* ‘two paths’ (Allin 1976:382), *adzápoo-hi* ‘paths’, *ámoogi-musi* ‘two fish’, *ámógf-mu* ‘fish (pl.)’ (Allin 1976:383), *p^hai-pídžé* ‘old woman’, and *p^hai-mupi* ‘two old women’ (Allin 1976:443).

form	gloss
<i>-ku</i>	inanimate dual
<i>-hi</i>	inanimate plural
<i>-músi</i>	masculine dual
<i>-múpi</i>	feminine dual
<i>-mu</i>	animate plural
<i>-ʔa</i>	human plural
<i>-βá</i>	plural for numerals and quantifiers

TABLE 8: BORROWED NUMBER MARKERS IN ALLIN’S (1976) DATA

There are two more bound grammatical morphemes in Allin’s data. One is a nominal derivational marker which expresses that something pertains to something, as in *haáni-miíná-a-gí* (steal-people-PERT-3.SG.NON_F) ‘thief’ (see further instances in items number 272-277). Another is a verbal suffix which, in Bora, marks main clause predicates. It is used in Resígaro in one type of verb that is borrowed from Bora; all verbs of this type are used together with a Resígaro verb *-k^hu* ‘do’, as in *heεβé-ʔi do-k^hu* (read-PRED/3.SG.F-do) ‘she reads’. In these cases, Resígaro seems to have borrowed complex Bora forms without analyzing them. However, the suffix *-ʔi* ‘PRED’ is also used

in at least one case that seems to be a native Arawakan stem, when it is used with *-k^hu* ‘do’ in *kiokó-ʔi* ‘to cut into pieces’.

In sum, the data examined in this section confirms a pattern of massive morphological borrowing that was observed in a corpus of Resígaro texts collected between 2003 and 2009 (Seifart 2009, 2011). More importantly, the existence of borrowed bound grammatical morphemes in the older documents from the 1920s and 1930s strongly suggests that massive morphological borrowing took place before the 1920s or 1930s when the Resígaro speech community disintegrated and the language became increasingly endangered. The fact that there are lower numbers of borrowed bound grammatical morpheme types and tokens in the older sources is consistent with the more limited total amount of data in these sources.

3.4. Structural influence

Although the lexical data analyzed here are only of limited use in identifying structural characteristics, there is one recurrent pattern in Rivet & Wavrin’s (1951) data which might document structural change from the 1920s to the 1970s, moving away from an Arawakan pattern and towards a structure like Bora. This concerns the occurrence of *-ki* (and transcriptional variants), which corresponds to the inherited Arawakan third person singular non-feminine marker *-gi*. Items that seem to include this suffix are identified in the column labeled “-gi” in Chapter 5. Instances of this form that can be securely identified as such by the existence of corresponding forms in contemporary Resígaro include the following: *-kí* ~ *-ki* (items number 53, 132, 145, 154, 179), *-ghi* ~ *-ghí* (52, 57, 137, 224, 225), *-ghĩ* (18), *-khí* (53), or *-kĩ* (297). This list also illustrates the range of variation in the transcription of the form *-gi* (3.SG.NON_F) in Rivet & Wavrin’s (1951) data. However, the vowel is consistently transcribed with variants of *i*, with the exception of *-ghe* (127).

This form is used as a non-feminine gender marker on nouns in these items in the older sources as well as in contemporary Resígaro. However, Rivet & Wavrin’s (1951) data seem to document that this form is also used as a suffix on verbs. First, we must point out here that Rivet & Wavrin (1951), who also noted that variants of *-ki* were frequently found in their data, conflate instances of *-gi* (3.SG.NON_F) with instances of the auxiliary verb *-k^hú* ‘do’; this is the case for instance in item 4 ‘she has given birth’, given as *odzanadr^ho-kə*, which corresponds to *oó dʒaáná do-k^hú* (PERF/child/3.SG.F-do) ‘she has already made a child’ (see also items number 262, 271, and 318). Note that instances of *-k^hú* ‘do’ are usually transcribed as *kə*. Rivet & Wavrin (1951) suggest that the set of suffixes they identified may be related to augmentative or superlative suffixes in related Arawakan languages.

The potential occurrence of *-gi* (3.SG.NON_F) as a verbal suffix is important because in contemporary Resígaro verbs do not usually take gender (or person) suffixes (Allin 1976; Seifart 2010). However, this is a common pattern in related Arawakan languages, such as Achagua (Wilson & Levinsohn 1992: 94; Meléndez L. 1998: 112-113, 126-127) and Piapoco (Reinoso Galindo 2002: 253). These languages use forms cognate

with Resígaro *-gi* (3.SG.NON_F) as cross-referencing suffixes for objects of transitive verbs and for subjects of stative intransitive verbs. The use of cross-referencing suffixes may thus be an old feature of the subgroup of Arawakan that Resígaro belongs to and it would have been lost in contemporary Resígaro, potentially after it came in contact with Bora.

The following Resígaro items in Rivet & Wavrin's (1951) data include instances of what seems to correspond to *-gi* (3.SG.NON_F): Firstly, there are about 11 transitive verbs (items number 3, 4, 5, 35, 95, 99, 186, 303, 309, 327); Secondly, there are about four items that could be stative intransitive verbs (items 108, 88, 100, 249); An thirdly, there are three items that appear to be active intransitive verbs, 'descend' (item 80), 'come' (item 314) and 'fly' (item 329). These latter verbs would not take cross-referencing suffixes in Arawakan languages.

A high proportion of the verbs that include what seems to correspond to *-gi* (3.SG.NON_F) cannot be related to contemporary Resígaro forms. This is interesting in itself, since it may indicate that these verbs were replaced, but it also means that the role of *-gi* (3.SG.NON_F) in Rivet & Wavrin's (1951) data cannot be easily determined. There are, however, at least two cases that appear to be quite clear examples of the presence of cross-referencing suffixes, which are absent in contemporary Resígaro. The first is a transitive verb in item 99, which would probably read (phonologically) *tsa po-táá-gi* (3.SG.NON_F/pregnant-CAUS-3.SG.NON_F) 'he fathered him'. A corresponding contemporary Resígaro form would be *tsa tsa po-tú* (3.SG.NON_F/3.SG.NON_F/pregnant-CAUS) 'he fathered him' (see also item 303). This form is particularly telling because in contemporary Resígaro, like in a number of related Arawakan languages, objects of causativized verbs must be overtly expressed (Seifart 2010). The form from the 1920s does not seem to include an overt object noun phrase, but instead a cross-referencing suffix.

The second striking example is a stative intransitive verb in item 100, which would probably read (phonologically) *tsa-mí kama-gi* (3.SG.NON_F-REC/drink-3.SG.NON_F) 'he was drunk'. A corresponding contemporary Resígaro form of this would be *tsa-mí kamú* (3.SG.NON_F-REC/drink) 'he was drunk', without cross-referencing affixes, or *gi-kamú* (3.SG.NON_F-drink) 'he was drunk', with a subject prefix. Note, however, that a past tense form of this verb in item 101 does not include such a suffix.

Although these two examples appear to document the presence of cross-referencing suffixes in older Resígaro, the assessment of a potential loss of cross-referencing suffixes since the 1920s must remain speculative because there are also many transitive and stative intransitive verbs in the data that do not include *-gi* (3.SG.NON_F). These include the transitive verbs in items 26, 61, 67, 74, 78, 97, 98, 102, 146, 187, 220, 256, 262, 263, 264, 313, and 328. There are also many stative intransitive verbs without such suffixes, as in items number 66, 109, 111, 210, 257, 288, 307, and 326.

Manuel María de Mataró's (no date) data from the 1930s are too scarce to allow drawing any conclusions with respect to a potential loss of cross-referencing suffixes. One instance of what could be a stative intransitive verb in these data ('sleep', item 43) may include such a suffix, but the other form given for that verb (item 44) would not. Two potentially transitive verbs (items 94, 95, 97, 98) do not include this form.

The loss of cross-referencing suffixes would represent a major structural change in the language, which could then be related to Bora influence although not directly so. Bora has just one verb class with respect to argument marking. First and second person subject pronouns procliticize to the verb, while third person subjects are indicated by gender and noun class suffixes. There could thus have been a structural pressure on Resígaro to give up the differentiation between two verb classes that differ in argument marking properties. However, the unanimous prefixation of subject cross-referencing pronouns is not directly modeled on Bora.

Finally, note that the potential structural change in Resígaro since the early 20th century described in this section would be entirely independent of the morphosyntactic subsystems that are affected by the heavy morphological borrowing—which also involves structural changes—described in section 3.3, above. This is confined to a few well-defined subsystems of the language, which have to do with individuation, number marking, and noun class agreement (Seifart 2011).

4. Phonological evidence for time depth of borrowing

The phonological shape of Bora loans in Resígaro provides some evidence for early borrowing before the earliest documentation of Bora data, which is a wordlist collected in 1819 (Martius 1867:279-281)⁵. Bora loans in Resígaro preserve word-initial *h*, a phonological characteristic which can be reconstructed for some Proto Bora-Muinane words, but which Bora had already lost in the data from 1819. Word-initial *h* in Resígaro words borrowed from Bora thus provides evidence for the time-depth of borrowing.

The relevant data showing that Resígaro loans in Bora are older than 1819 are summarized in Table 9. This table combines Resígaro data from all three sources used in the current study, and Resígaro data from Seifart (2009), with Muinane data from Walton, Walton & Pakky de Buenaventura (1997); The Muinane data provide evidence for the phonological shape of Proto Bora-Muinane words.⁶ Word-initial *h* was present in a number of Proto-Bora-Muinane words and was lost in Bora (Aschmann 1993:41-42). This is shown by its presence in Muinane (Bora's relatively close sister language) and absence in cognate Bora forms (as in items 1-5, 10, and 13 in Table 9).

Martius's (1867) Bora wordlist collected in 1819 contains some data that suggest that word initial *h* was already lost at that time. The relevant data includes ⟨iguághco⟩ 'flower' (Martius 1867:279), which corresponds to contemporary Bora *í-g^wahko* (this-CL:FLOWER) 'flower' (compare with item 2 in Table 9), ⟨ihbá⟩ 'deer' (Martius 1867:280), which corresponds to contemporary Bora *íiba* (compare Muinane *híibaí*), and ⟨ihnĵöhöh⟩ 'earth' (Martius 1867:281), which corresponds to contemporary Bora *íjnu-hí* 'earth' (compare Muinane *híini-he*). In all three cases, word-initial *h*, which can be reconstructed for Proto Bora-Muinane, was already lost in 1819.

Against this backdrop, items 1-5 in Table 9 clearly suggest that borrowing from Resígaro into Bora took place before 1819, as the borrowed forms retain word-initial *h*. Items 6-10 are in accordance with this scenario, although they do not provide direct evidence themselves because no cognate Muinane form is attested for these, which would be indicative of the existence of word-initial *h* in Proto-Bora-Muinane for these words. Items 11-12 are again in accordance with the scenario that Resígaro borrowed Bora words before they lost word-initial *h*, or at least they do not contradict this hypothesis, although in these two cases the direction of borrowing is unclear. Item 13 is an example of a contemporary Bora word that did not have a word-initial initial *h* in Proto Bora-Muinane, and accordingly the form borrowed in Resígaro also does not have word-initial *h*.

⁵ Martius calls the language of this wordlist *Miranha Oirá Açu Tapuya*. *Miranha* (or *Miraña*) is the Tupí-based name used for Bora by all early travellers who arrived in the region from Portuguese (and later Brazilian) territory to the east (see Tessmann 1930:267; Seifart 2005:19). It comes from Nhengatú or Lingua Geral, the Tupian lingua franca of Northern Brazil at the time. Today *Miraña* is the autodenomination of an ethnic group speaking a very close variety of Bora (Seifart 2005).

⁶ Incidentally, the fact that Bora words that were borrowed into Resígaro can be reconstructed in Proto Bora-Muinane provides evidence for the directionality of borrowing from Bora into Resígaro, not the other way around. See Seifart (2011) for more examples.

	Resígaro	Bora	Muinane	Gloss	Comment
1	<i>he?e-</i>	<i>e?-</i>	<i>hó?o-</i>	that	not in Allin's list (Chapter 7), but explicitly mentioned in Allin's (1976) treatment of demonstrative pronouns; a different cognate set is Bora <i>eene</i> 'that' - Muinane <i>óono</i> 'that' which has no corresponding form in Resígaro
2	<i>hi-</i>	<i>i-</i>	<i>hi-</i>	this	item 296 in Allin's list
3	<i>heété</i>	<i>eéte</i>	<i>hóoto</i>	flies	item 360 in Allin's list
4	<i>háákuudúí</i>	<i>áákuurúí</i>	<i>hákiríí</i>	bird, sp. <i>montete</i>	Resígaro form attested in Seifart (2009), not in Allin (1976)
5	<i>hibii</i>	<i>íibii</i>	<i>hííbi</i>	coca	item 338 in Allin's list form with <i>h</i> exists in many languages of the region, including Nonuya, Ocaina, Witoto, and Andoke
6	<i>húúne-úí</i>	<i>úúne-uu</i>	no cognate form attested	lake	item 168 in Rivet & Wavrin's list (Chapter 5), item 332 in Allin's list; potentially the initial syllable of Muinane <i>híkóoba</i> 'lake' is cognate with the initial syllable of Bora <i>úúne-uu</i> 'lake'
7	<i>haagúí</i>	<i>áágwa</i>	no cognate form attested	partridge	item 353 in Allin's list
8	<i>haádza-?é</i>	<i>áádza</i>	no cognate form attested	tree, sp. <i>pona</i> , <i>yaripa</i>	item 374 in Allin's list
9	<i>hoow-?é</i>	<i>óóu-?e</i>	no cognate form attested	tree, sp. <i>cumala</i>	item 376 in Allin's list
10	<i>ho?búí</i>	<i>o?ba</i>	no cognate form attested	capybara	item 44 in Rivet & Wavrin's list, item 365 in Allin's list
11	<i>hamaántúí</i>	<i>amána</i>	<i>hámana</i>	dolphin	item 354 in Allin's list; direction of borrowing unclear, cognate forms exists also in other Arawakan languages; the form in Yucuna (Arawakan) also has an initial <i>h</i> , in other Arawakan languages there is no initial <i>h</i> (Ramirez 2001:374, 644).
12	<i>ámoo-gí</i>	<i>ámoó-be</i>	no cognate form attested	fish (generic)	item 106 in Manuel María de Mataró's list (Chapter 6), item 355 in Allin's list; direction of borrowing uncertain, no cognate forms in Muinane or Arawakan
13	<i>íímuu-?ó</i>	<i>íímuu-?o</i>	<i>íími-?u</i>	honey	item 1 in Rivet & Wavrin's list, item 226 in Allin's list
14	<i>uni</i>	<i>uni</i>	<i>híni-</i>	saliva	item 333 in Allin's list; <i>uni</i> is the only word beginning with <i>u</i> in Allin (1976)
15	<i>heeβé?íí</i>	<i>eeβé(-?i)</i>	<i>ééβe(-?i)</i> ; <i>ooβo</i>	to measure	item 388 in Allin's list; the Muinane form <i>ééβe(-?i)</i> may be recently borrowed from Bora
16	<i>hí?nuhwi-?é</i>	<i>í?núhúí-k'ó</i>	<i>ínihí-?o</i>	balsa tree	item 375 in Allin's list

TABLE 9: EVIDENCE FOR BORROWING BEFORE LOSS OF /h/ IN BORA

Items 14-16 are the only relevant examples in Allin (1976) and Seifart (2009) that are not in accordance with the scenario sketched above. Item 14 may be explained as being a very recent borrowing, after word-initial *h* was lost in Bora. It is exceptional in Resígaro in that it is the only word that begins with *w* in Allin's (1976) wordlist and indeed all other available Resígaro material.

In items 15-16, on the other hand, it seems that the Proto-Bora-Muinane form did not have word-initial *h* and that it was added in Resígaro in the borrowing process, maybe as a means of phonological nativization, applying a rule of regular correspondences between the phonological shape of early Bora borrowing and contemporary Bora forms. Item 16 may also be taken to suggest that all borrowing took place very recently and the presence of word-initial *h* took place as a means of phonological nativization in Resígaro. This scenario would in principle also work for items 1-12, but there are two reasons why this scenario is less likely than an early borrowing from Bora. First, in items 1-5 one would have to make the additional assumption that the form was borrowed after word-initial *h* was lost in Bora, and then word-initial *h* was added again in Resígaro. Second, and more importantly, there is no requirement for word-initial *h*, or any other word-initial consonant in Resígaro phonotactics. There are many words beginning with vowels, except for *w* (which occurs word-initially only in the exceptional Bora loan mentioned above, see item 14 in Table 9).

In sum, overall the available evidence suggests that most of the borrowing from Bora into Resígaro took place before Bora lost word-initial *h*, which was before 1819.

5. Bora elements in a wordlist from the 1920s

This chapter presents full annotation of the Resígaro data presented by Rivet & Wavrin (1951). It provides forms corresponding to contemporary Resígaro wherever possible, and it identifies all elements borrowed from Bora in Rivet & Wavrin's (1951) data. The identification of Bora elements in the Resígaro data—in this as well as in the following two chapters—is based on my knowledge of Bora, gained during field-based research beginning in 1999, in conjunction with extensive consultation of published sources on Bora, in particular the excellent descriptive work by Thiesen (1996) and Thiesen & Thiesen (1998).

The presentation of the data and annotations make use of a number of conventions that need to be explained before presenting the annotated data. The columns “French” and “Resígaro” in the list of data in this chapter contain the data copied from Rivet & Wavrin (1951), with the only addition that morphological material borrowed from Bora in the Resígaro data is shaded. The Bora source forms that correspond to the borrowed elements identified by shading in the Resígaro data can be found in that part of Allin's (1976) wordlist that is reproduced in Chapter 7, if not otherwise noted in the comment-column.

The other columns contain annotations by me. The column “sum[mary of comparison]” notes how the Resígaro forms given by Rivet & Wavrin (1951) compare to contemporary Resígaro forms with respect to the etymological origin of the forms. This column uses the abbreviations explained in Table 10, and combinations of these. Note that complex forms consisting of three or more morphemes are represented by three symbols from Table 10 (e.g. “a.a.a” stands for a complex Arawakan form consisting of three or more morphemes). The column labeled “gi” identifies words that possibly include cross-referencing suffixes (see Section 3.4).

Whenever necessary, reconstructed Proto Arawakan forms (Payne 1991) or forms from the intermediate Arawakan Proto language “Divisão Japurá-Colômbia” (Ramirez 2001), to which Resígaro belongs, are provided in the column “comments”; reconstructed Proto-Bora-Muinane forms, together with any other observations are also included in this column. Note that some of the more complex contemporary Resígaro forms, especially those corresponding to entire phrases, had to be constructed based on documented contemporary Resígaro forms and what is known about Resígaro grammar, mainly from Allin's (1976) work.

abbreviation	explanation
a-a	Wavrin's form is Arawakan and corresponds to the same Arawakan form in contemporary Resígaro
b-b	Wavrin's form is Bora and corresponds to the same Bora form in contemporary Resígaro
a-b	Wavrin's form is Arawakan and corresponds to a Bora form in contemporary Resígaro
a-Na	Wavrin's form is Arawakan and corresponds to a different Arawakan form in contemporary Resígaro
a.b-a.b	Wavrin's form is complex consisting of an Arawakan stem and a Bora suffix, and there is a corresponding form in contemporary Resígaro

TABLE 10: CONVENTIONS USED IN THE ANNOTATION OF THE 1920S AND 1930S DATA

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
1	bee	abeille	<i>hēmə(ü)hó</i>	b.b- b.b	<i>íimur-ʔó</i> (sweet -CL:OBLONG) ‘beehive, honeycomb’		
2	shelter, hut	abri, hutte	<i>nóhikhé</i>	b.b- b.b	<i>núúhi-gú</i> (shelter -CL:PLANK) ‘shelter’		
3	to accept: I accept	accepter : j’accepte	<i>pikāk(ü) pikā-k</i>			y	
4	to give birth: she has given birth	accoucher : elle a accouché	<i>odzanadr^ˆo-kə</i>	a.a.a- a.a.a	<i>oó dʒaáná do-k^hú</i> (PERF/child/3.SG.F-do) ‘she has already made a child’	y	
5	to buy: he buys	acheter : il achète	<i>tsa-tówā-ki</i>	a-Na	<i>gi-vení gi-ʔní</i> (3.NON_F- pay/3.NON_F-give) ‘he buys (lit. gives its pay)’	y	
6	agouti	agouti	<i>pēhebθə</i>	a-Na	<i>p^hítsí</i> ‘agouti’		
7	needle	aiguille	<i>nowē(e)ghi</i>	a.a- a.a	<i>noβígí</i>	y	
8	wing	aile	<i>kitzēēnə</i>	a-Na	<i>-aʔnáapí</i>		= arm, see 43
9	to go: he goes	aller : il va	<i>nek-tsa-hepe</i>	a.a- a.a	... <i>tsa íʔpí</i> (3.SG.NON_F/go) ‘he goes/went’		
10	to go: he has gone	aller : il est allé	<i>tsa-hīpi</i>	a.a- a.a	<i>tsa íʔpí</i> (3.SG.NON_F/go) ‘he goes/went’		
11	pineapple	ananas	<i>nanā(ha)nĩ</i>	a-a	<i>nanáana</i>		This word has a Tupi origin, it has no etymology in Arawakan and is not used in Bora, it is unclear why it is used in Resígaro
12	year	année	<i>kāme</i> [cf. saison sèche]	a-a	<i>kámi</i>		
13	to bring: he brings	apporter : il apporte	<i>tsā-wakani</i>	a.a.a- a.a.a	<i>tsa βa-haní</i> (3.SG.NON_F/1.PL-bring) ‘we bring it’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
14	groundnut; peanut	arachide	<i>matsa(h)ākə, matsā(a)kə</i> [cf. haricot]	b-b	<i>mats^haákú</i>		Proto Bora-Muinane <i>*mátsaka</i> confirms direction of borrowing; /ts ^h / instead of /ts/ is an exception
15	spider	araignée	<i>hēhe(i)n(h)i</i>	a-b	<i>paagáú</i>		Arawakan <i>*heen(u)i</i> (Ramirez 2001:630)
16	tree	arbre	<i>hēhow(h)e</i>	a.b- Na.b	<i>afáana-?é</i> (tree-CL:TREE) ‘tree’		stem not identified, but might include <i>-?e</i> (CL:TREE)
17	bow	arc	<i>wə(ü)-kāruku</i>				stem not identified, but it is likely that this term includes <i>-gu</i> (CL:PLANK), like Bora <i>tobóó-gwa</i> (shoot-CL:PLANK) ‘bow’
18	money	argent (monnaie)	<i>kopā(ha)ghĩ</i>	a.a- a.a	<i>kopáagí</i>	y	
19	clay	argile	<i>hēpo</i> [cf. terre]	a-a	<i>hipó-</i>		
20	today	aujourd’hui	<i>mahānə</i>	a-a	<i>mooháná</i>		
21	goodbye	aurevoir	<i>honopé</i>	a.a.a- a.a.a	<i>ó no-?pí</i> (PERF/1.SG-go) ‘goodbye (lit. I am already going)’		
22	stingy	avare	<i>kemo-tzani</i>				
23	blind	aveugle	<i>ōpano-kə</i>			y	
24	banana: banana beer	banane : chicha de banane	<i>džakugi-bə</i>	a.b- a.b	<i>šakoo?gí-bú</i> (banana -CL:DRINK) ‘banana drink’		not in Allin (1976); <i>-bu</i> is very common for drinks, see 58)
25	banana tree	bananier	<i>tšakōghi</i>	a-a	<i>šakoo?gí</i>	y	
26	to build: he builds	bâtir : il bâtit	<i>tsa-hiñeketsətsə</i>				
27	a lot of; many	beaucoup	<i>hanepə(ü)</i>	a-a	<i>anepú</i>		
28	brother-in-law	beau-frère	<i>no-nakhootza</i>	a.a- a.a	<i>no-nákóotsá</i> (1.SG- brother_in_law) ‘my brother in law’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
29	father-in-law	beau-père	<i>n(w)e-nāghi</i>	a.a- a.a	<i>nó-náagí</i> (1.SG-brother) 'my brother'	y	father in law is <i>foo?gí</i>
30	daughter-in-law	belle-fille	<i>no-nināwaheke</i>	a-Na	<i>i?gíínó</i> 'daughter in law'	y	
31	mother-in-law	belle-mère	<i>pidžāhadr[˘]ũ</i>	a.a- Na.a	<i>féedó</i>		-do is Arawakan feminine
32	sister-in-law	belle-soeur	<i>no-nināwa</i>	a.a- a.a	<i>no-nínaaβú</i> (1.SG-sister_in_law) 'my sister in law (of man)'		
33	good; well	bien	<i>hahemehéwo(t)zə</i>	a-a	<i>hamé?</i> 'like this'		
34	white	blanc	<i>tsawīθə</i>	a-Na	<i>heφí?</i>		
35	to hurt: you hurt	blessier : tu blesses	<i>hanakaka(i)nē(he)-khə</i>	a-Na	? <i>k^hú</i> 'do'	y	main verb unidentified, many transitive verbs are formed with <i>k^hú</i> 'do'
36	to drink: he drinks	boire : il boit	<i>p-ēr[˘]ə</i>	a.a- a.a	<i>pi-?dú</i> (2.SG-drink) 'you drink, drink!'		
37	to drink: he has drunk	boire : il a bu	<i>tsa-me-her[˘]ə</i>	a.a.a- a.a.a	<i>tsa-mí i?dú</i> (3.SG.NON_REC/drink) 'he drank'		
38	wood	bois	<i>hīθatzō</i>	a-a	<i>ítsítsó</i>		
39	good	bon	<i>θaghio(o)-ke</i>	a-Na	<i>kafó?</i>	y	
40	hello	bonjour	<i>kadžunupukaə</i>	a.a.a- a.a.a	maybe <i>kafó? no pi-k^hú</i> (good/ 1.SG/ 2.SG-do) 'you do me good' (used for 'thanks')	y	
41	good evening	bonsoir	<i>homedžinōfě</i>				
42	mouth	bouche	<i>wā-nū</i>	a.a- a.a	<i>βa-nó</i> (1.PL-mouth) 'our mouth'		
43	arm	bras	<i>wa-nāhapi</i>	a-a	<i>βa-?náapi</i> (1.PL-arm) 'our arm'		= wing, see 8
44	capybara	cabiai	<i>hōpa</i>	b-b	<i>oba</i>		not attested in contemporary Resígaro but Bora is <i>o?ba</i>

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
45	friend	camarade	<i>āminānā</i>	a-Na or a-a	<i>tseemánági</i>		alternatively a form that includes <i>-mina-na</i> (people-PL)
46	this one (here)	celui-ci, celle-ci	<i>ghehě</i>	a-a	<i>gi?i</i>		
47	this one (there)	celui-là, celle-là	<i>kehēmě</i>				
48	ash	cendre	<i>pā(h)kí</i>	a-a.b	<i>ókóniigi-dzihú</i> (fire -CL:DUST) ‘dust’	y	Arawkan <i>*pa?li</i> (Ramirez 2001:654)
49	heat	chaleur	<i>adžápené</i> [cf. <i>sueur</i>]	a-Na	<i>ha?mo</i>		no similar form is attested in contemporary Resígaro, but Manuel María de Mataró gives a similar form (item number 20)
50	<i>chambira</i> , textile plant (<i>Astrocaryum</i>)	chambira, plante textile (<i>Astrocaryum</i>)	<i>komē(he)tsé</i>	a-a	<i>komee?tsí</i>		
51	field	champ	<i>čakar[~]i</i> [Kičua : <i>čakara</i>]	a-a	<i>džakádé</i>		could be from Quechua, as Rivet & Wavrin seem to suggest, no cognates found in other Arawakan languages (Ramirez 2001)
52	bat	chauve-souris	<i>petsēghi</i>	a-a	<i>pits^hiígí</i>	y	
53	chef	chef	<i>kihāwíkhí, kihā(a)wíki</i>	a-Na	<i>ke?βígí</i>	y	
54	way	chemin	<i>adžhápó</i> [cf. <i>marcher</i>]	a-a	<i>adžápó</i>		
55	hair (PL)	cheveux	<i>wa-tsihīna</i> [cf. <i>poils</i>]	a.a- a.a	<i>βa-tsinú</i> (1.PL-hair) ‘our hair’		
56	banana beer	chicha de banane	<i>džakugi-bā</i>	(see 24)			
57	cassava/manioc beer	chicha de manioc	<i>māghi</i>	a-a	<i>maa?gí</i>	y	
58	<i>pifayo</i> (palm fruit) beer	chicha de pifayo	<i>pipiki-bū(hg)</i>	a.b- a.b	<i>pipíigi-bú</i> (pifayo -CL:DRINK) ‘pifayo drink’		not in Allin (1976); <i>-bur</i> is very common for drinks, see 24)

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
59	dog	chien	<i>hīini</i>	a-a	<i>íini</i>		
60	sky	ciel	<i>hahihí</i> [cf. soleil]	a.b- a.b	<i>há?i-hí</i> (sun-CL:DISC) ‘sky’		- <i>hi</i> (classifier that corresponds to Resígaro - <i>hi</i>) is also used in Bora <i>níhk^le-hi</i> (?-CL:DISC) ‘sky’
61	to conquer: he conquers	conquérir : il conquiert	<i>pitsēkó</i>				
62	copal resin	copal	<i>mā(ah)ni</i>	b-b	<i>maání</i>		could be from a third language
63	rope	corde	<i>hēpihīpi</i>	a-a	<i>epípi</i> ‘liana’		
64	cotton	coton	<i>tomahātsi</i>	a-a	<i>ts^homaáts^hí</i>		
65	neck	cou	<i>wa-ñutse</i>	a.a- a.a	<i>βa-ɲotʃ^hí</i> (1.PL-neck) ‘our neck’		
66	to lie down: he lies down	se coucher : il se couche	<i>tsa-karə(ü)dži</i>	a-Na	<i>-hepítú, -tó?mu</i> ‘lie down’		
67	to sew: I sew	coudre : je couds	<i>no-tzaninə</i>	a.a- a.a	<i>no-tsanəɲú</i> (1.SG-sew) ‘I sew’		
68	curved	courbe	<i>papazihí</i>	b.b.b- b.b.b	<i>pa-pásí-hí</i> [...] (complete -CL:RING-PL) ‘completely curved/like rings’		
69	short	court	<i>tətəpi-kə</i>	a-Na	<i>mats^hó</i>	y	
70	cousin	cousin	<i>hapināghiiāni</i>	a.a.a- a.a.a	<i>pi-náagí i?dzaání</i> (2.SG-brother/son) ‘your brother’s son’		
71	knife	couteau	<i>hirihigíghú</i>	a.b- Na.b	<i>βa?a-gú</i> (cut?-CL:PLANK) ‘machete’		unidentified stem; all words for cutting instruments are formed with the classifier - <i>gú</i> in Resígaro, which corresponds to Bora - <i>g^wa</i>
72	crocodile	crocodile	<i>peghi(i)ni</i>	a-a	<i>pegínú</i>		
73	buttocks	cul	<i>fə(ü)hédže</i>	a-a	<i>φa-heéde</i>		

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	sg.	comment
74	to defecate: I defecate	déféquer : je déféqué	<i>no-wahepé</i>	a.a-a.Na	<i>no-ʔtsoɲú</i> (1.SG-defecate) 'I defecate'		
75	to defecate: I have defecated	déféquer : j'ai déféqué	<i>tša-wahepé</i>	(see 74)			
76	tomorrow	demain	<i>nāpi-hēki</i> [cf. nuit, soir]	a-a	<i>naapiʔéʔ</i> 'morning'	y	
77	two men ¹ will leave ² tomorrow ³	deux hommes ¹ partiront ² demain ³	<i>nāpie³ itsā(a)mā¹ atsagīpi²</i>				
78	to demolish: he demolishes	démolir : il démolit	<i>hometsekətsü</i>				
79	tooth	dent	<i>wō-ne</i>	a.a-a.a	<i>β-oné</i> (1.SG-tooth) 'our tooth'		
80	to descend: he descends	descendre : il descend	<i>tahipuū(h)r^ˆuki</i>	a-Na	<i>-hodoʔkó</i> 'descend'	y	
81	soothsayer	devin	<i>tsegihā(a)make</i>			y	
82	<i>Dicotyles labiatus</i>	Dicotyles labiatus	<i>hapē(hi)tšə</i>	a-a	<i>hapītsú</i>		
83	<i>Dicotyles toriquatus</i>	Dicotyles toriquatus	<i>takīē(he)ni</i>	a-Na	<i>aɲevídogí</i>		
84	to say: he says	dire: il dit	<i>tša-mi-kē(e)mi</i>	a.a.a-a.a.a	<i>tša-mí kemú</i> (3.SG-REC/say) 'he said'		
85	to say: he has said	dire: il a dit	<i>kehōōnōm</i>				
86	finger	doigt	<i>w-aki-ékkhū</i>	a.b-a.b	<i>βa-ké-gú</i> (1.PL-hand -CL:PLANK) 'our finger'		
87	domestic	domestique	<i>nə(ü)tāte</i>				
88	to sleep: he sleeps	dormir : il dort	<i>tša-mahāki</i>	a-a	<i>-imú</i> 'sleep'	y	
89	back	dos	<i>wa-kutsa-padr^ˆi</i>	a-Na	<i>βání</i>		
90	right	droit	<i>tseke(ih)dzowĩ</i>	a-a	<i>tsíʔkííʔ</i>		
91	right (not left)	droite (opposé à gauche)	<i>tsikētsə</i>	a-a	<i>tsíʔkííʔ</i>		
92	hard	dur	<i>tadr^ˆakidzə</i>	a.a.a-a.a.a	<i>taʔdagi tsú</i> (hard -3.SG.NON_F/3.SG.NON_F) 'it his hard'		

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	gc.	comment
109	to be: he will be	être : il sera	<i>tsa-hikedzi</i>				
110	excrement	excréments	<i>nō(h)-tsom(h)ə</i>	a.a- a.a	<i>no-ʔtsoŋú</i> (1.SG-defecate) 'I defecate'		
111	to be hungry: he is hungry	faim : il a faim	<i>patewaké(i)gi(yǔ)</i>	a-Na	<i>da-máʔkaaní</i> (3.SG.NON_F-hungry) 'he is hungry'		
112	female	femelle	<i>inā(a)r˘˘o</i>	a.a- a.a	<i>ináadó</i>		
113	woman	femme	<i>inahār˘˘ó</i>	(see 112)			
114	a woman ¹ has come ² this morning ³	une femme ¹ est venue ² ce matin ³	<i>nāpie</i> ³ <i>ina(a)dr˘˘ü</i> ¹ <i>iputā(a)nú</i> ²				
115	iron	fer	<i>hepēsikō</i> [cf. hache]	a(.b)- a	<i>epītsʰí</i> 'axe'		a form derived with the borrowed classifier <i>-ko</i> may refer to a pointed iron object
116	fire	feu	<i>ketsedžohiki</i>	a-a	<i>ketshiiʔ</i> 'burn'	y	
117	leaf	feuille	<i>napānə</i>	a-a.b	<i>apáná-ʔaamí</i> (leaf-CL:LEAF) 'leaf'		
118	girl; daughter	fille	<i>noho-tó</i>	a.a- a.a	<i>no-ótó</i> (1.SG-daughter) 'my daughter'		
119	little girl	fillette (petite)	<i>(h)ə(ü)we-g(h)idže</i>				
120	girl	fillette (grande)	<i>hokoghē-gidžá</i>				
121	son	fils	<i>no(h)ō-džā(h)ní</i> [cf. petit garçon]	a.a- a.a	<i>noʔ-džāání</i> (1.SG-son) 'my son'		
122	arrow	flèche	<i>nōō-tset</i>	a.ʔ- a.b	<i>noótsí-gú</i> (arrow? -CL:PLANK) 'arrow'		
123	flower	fleur	<i>kēwé</i>	a-a	<i>giǰí</i>		
124	forest	forêt	<i>tāpahə</i>	b.b- b.b	<i>té-bahú</i> (this-CL:BUSH) '(this) bush'		
125	ant: <i>curuinse</i>	fourmi : fourmi curuinse	<i>üdr˘˘ühüki</i>	a-a	<i>hurduúgí</i>	y	

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
126	ant: <i>isula</i>	fourmi : fourmi isula	<i>māhani</i>	a-a	<i>mané</i>		
127	anteater	fourmilier	<i>pēheghe</i> [cf. charognard]	a-a	<i>piígí</i>	y	
128	hall; foyer	foyer	<i>wanihĩtsi</i>	a-a	<i>paniĩtsí</i> ‘house’		unpossessed form, see also 182
129	brother	frère	<i>nonā(ha)džə</i>	a.a- a.a	<i>nó-náagí</i> (1.SG-brother) ‘my brother’		
130	cold	froid	<i>hiphekə (h)ə</i>	a-a	<i>hi?pií?</i>		
131	fruit	fruit	<i>tsemehəhə</i>	a-Na	<i>niíkú</i>		
132	<i>pifayo</i> fruit (<i>Guilelma</i>)	fruit pifayo (<i>Guilelma</i>)	<i>hiphehiki</i>	a.a- a(.b)	<i>pipíigí-ú</i> (one fruit); <i>pipíigí</i> (species, many fruits)	y	<i>pipíigí</i> can be used as collective/generic
133	<i>pifayo</i> beer	chicha de pifayo	<i>pipiki-bü(hg)</i>	(see 58)			
134	boy	garçon (petit)	<i>tsahān(h)ə</i> [cf. fils]	a-a	<i>i?žaańí</i> ‘son’		
135	little boy	garçonnet	<i>pa(i)gihōtsə</i>	a.a.a- a.a.a	<i>p^hai-gí oó tsú</i> (old -3.SG.NON_F/PERF/3.SG.NON _F) ‘he is already grown up’		
136	left	gauche	<i>kitsapāwə</i>	a- Na.b	<i>apá?mí-?osí</i> (left-CL:HAND) ‘left hand’		
137	son-in-law	gendre	<i>no-dže(i)ghi</i>	a.a- a.a	<i>no-?džíigí</i> (1.SG- son_in_law) ‘my son in law’	y	
138	generous	généreux	<i>inokopəphə</i>				
139	genie	génie	<i>θadžohətsimihin(hə)</i>				
140	knee	genou	<i>hor^{ˆˆ}onə</i>	a-a.b	<i>ho?dóna-ú</i> (knee -CL:ROUND) ‘knee’		

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	sg.	comment
141	neck	gorge	<i>wa-penohōnā(h)ə</i>	a.b- a.b	<i>βa-pepóónú-hu</i> (1.PL-swallow-NMLZ-CL:TUBE) 'swallowing tube'		
142	fat	graisse	<i>wa-pedr̄ē(he)kə</i> [cf. huile]	a.a- a.a	<i>βa-p^hedee?káá-nú</i> (1.PL-fat-NMLZ) 'our fat'		possessed form, see also 157
143	big	grand	<i>dza(h)inoketzə</i>	a-a	<i>dʒidʒáagí</i>		
144	grandmother	grand'mère	<i>odr̄adr̄ā(h)n(h)ə</i>	a-Na or b	<i>taádʒé, hiidó</i>		
145	grandfather	grand-père	<i>adr̄owe(i)ki</i>	a-Na	<i>t'a?díio</i>	y	Wavrin's form probably contains a reflex of Arawkan * <i>haβe-li</i> (Ramirez 2001:369)
146	war: I make war	guerre : je fais la guerre	<i>m(ǔy)ananukə(ü)tā(ā)ni</i>	/			
147	axe	hache	<i>hapēhetsi</i> [cf. fer]	(see 115)	<i>epíts^hɾ</i>		
148	hedge	haie	<i>fadr̄ēho</i>				
149	bean	haricot	<i>matsā(a)kə</i> [cf. arachide]	(see 14)	<i>mats^haákú</i> 'peanut'	y	
150	grass	herbe	<i>hemī(hi)θi</i> [cf. riz]	a-a	<i>himítsi</i>		
151	yesterday	hier	<i>noku(t)zami</i> [cf. jour]	a.a- a.a	<i>nokótsá-mí</i> (yesterday -REC) 'yesterday'		
152	a man ¹ came ² yesterday ³	un homme ¹ est venu ² hier ³	<i>nukutsa³ atsaghi¹ hikutā(nā)²</i>	a.a.a- a.a.a	<i>nokótsá atsáagí i?kotaná</i> (yesterday/man/arrive) 'a man arrived yesterday'		
153	man (human being)	homme (homo)	<i>nomihīna</i>	a.a- a.a	<i>no-mína</i> (1.SG-people) 'my people'		
154	man (male person)	homme (vir)	<i>atsa(h)āki</i> [cf. mâle]	(see 154)	<i>atsáagí</i>	y	
155	a man ¹ came ² yesterday ³	un homme ¹ est venu ² hier ³	<i>nukutsa³ atsaghi¹ hikutā(nā)²</i>	(see 152)			

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
156	two men ¹ will leave ² tomorrow ³	deux hommes ¹ partiront ² demain ³	<i>nāpie³ itsā(a)mə¹</i> <i>atsagīpi²</i>				
157	oil	huile	<i>ped(r˘)ekōtsi</i> [cf. graisse]	a-a	<i>p^hedee?katsí</i>		unpossessed form, see also 142
158	yam	igname	<i>of(w)ehēná</i>	a- a.(b)	<i>oφíiná-ú</i> (yam -CL:ROUND?) ‘yam’		status of suffix in contemporary Resígaro unclear
159	he, she	il, elle	<i>tsá</i>	a-a	<i>tsú ~ tsá; tsó</i>		
160	they	ils, elles	<i>namiknē</i>	a-a	<i>nú; mi?á</i>		
161	Resígaro Indian	indien resigaro	<i>r˘˘ā(h)panihīn</i>	a-a	<i>daápemiínú</i>		
162	jaguar	jaguar	<i>tsakə(ü)kakhāmīni</i>	a-Na	<i>íini</i>		
163	leg	jambe	<i>wā-hapi</i> [cf. os]	a- a.(b)	<i>-hii?pá-kuba</i> (leg-CL:LEG) ‘leg’		
164	javelin; spear	javelot	<i>tə(ü)pokə</i>	b.b- a.b	<i>nóótsi-gú</i> (arrow -CL:PLANK) ‘arrow’	y	<i>tubó-ko</i> (shoot- CL:POINTED) ‘arrow’ is not attested in contemporary Resígaro, but would be a regular correspondence of Bora <i>tubóó-ko</i> (shoot- CL:POINTED) ‘arrow’
165	I, me	je, moi	<i>no, noho</i>	a-a	<i>no</i>		
166	young	jeune	<i>neghihehə</i>	a-Na	<i>ókógígí</i>		
167	day	jour	<i>noku(t)zami</i> [cf. hier]	(see 151)	<i>nokótsú</i> ‘yesterday’		
168	lake	lac	<i>(h)ə(ü)nēhə</i> [cf. eau, source]	b.b- b.b	<i>húne-ú</i> (lake?-CL:ROUND)		<i>-ú (-hə)</i> is probably a classifier suffix, see 222, 250, 301, 319

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	gc.	comment
169	milk	lait	<i>enehitsi</i> [cf. mamelle]	a-Na	<i>iʔní-ʔaanú</i> (suck -CL:LIQUID) ‘milk’		-ʔaanú is a native Arawakan classifier for liquid (Allin 1976:161); Wavrin’s form could be <i>iʔní-tsí</i> (suck-NMLZ)
170	language; tongue	langue	<i>w-ehēhepe</i>	a.a- a.a	<i>β-eʔhéepé</i> (1.PL-tongue) ‘our tongue’		
171	tears	larmes	<i>nonihānə̃</i>	a.a.a- a.a.a	<i>no-ŋi-ʔaanú</i> (1.SG-tear -CL:LIQUID) ‘my tear(s)’		-ʔaanú is a native Arawakan classifier for liquid (Allin 1976:161)
172	to wash oneself: I wash myself	se laver : je me lave	<i>no-hapā(ha)-kə</i>	a.a.a- a.a.a	<i>no-pa-p^haaβú</i> (1.SG-wash -?) ‘I wash’	y	
173	to wash oneself: I have washed myself	se laver : je me suis lavé	<i>ominopā(ha)ni</i>	a.a.a- a.a.a	<i>oó-mi no-páá-ni</i> (PERF-REC/1.SG-wash-?) ‘I already washed myself’		
174	to get up: he gets up	se lever : il se lève	<i>tša-hitsakahān(hě)</i>				
175	lip	lèvre	<i>wa-nuhā(a)ri</i>	a.a- a.a	<i>βa-nóʔaaβí</i> (1.PL-lip) ‘our lip’		
176	lizard	lézard	<i>kotsē(h)ewə</i>	a-Na	<i>kóʔoogí</i>		could be different species
177	far	loin	<i>tsiawakā(a)-ghí</i>	a-a	<i>dʒaʔáktúʔ</i>	y	
178	long	long	<i>θsewinodzuwi</i>	a-a	<i>tseinóʔ</i>		
179	moon	lune	<i>kihēki, kihē(he)ki</i>	a-a	<i>keégí</i>	y	
180	hand	main	<i>wāki, wā(ā)ki</i>	a.a- a.a	<i>βa-ké</i> (1.PL-hand) ‘our hand’	y	
181	maize; corn	maïs	<i>wehēkhə, wehēkə</i>	a- a(.b)	<i>βeéká-ʔó</i> (maize -CL:OBLONG) ‘maize cob’		can probably be used without classifier as generic term
182	house	maison	<i>nō(ho)-pā(a)nə̃</i>	a.a- a.a	<i>no-paánú</i> (1.SG-house) ‘my house’		possessed form, see also 128

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
183	bad	mal	<i>nikā(y)otze</i> [cf. mauvais]	a.a.a- a.a.a	<i>ní kasoó tsú</i> (no/good/3.SG.NON_F) 'he/it is not good'		
184	male	māle	<i>atsā(ha)ki</i> [cf. homme]	(see 154)	<i>atsáagí</i>	y	
185	udder (of goat/cow); teat (of dog/cat/rabbit)	mamelle	<i>inihūtsi</i> [cf. lait]	a.a- a.b	<i>i?ní-mú</i> (suck-CL:MILK) 'breast'		Wavrin's form is probably <i>i?ní-tsí</i> (suck-NMLZ)
186	to eat: he eats	manger : il mange	<i>no-mete-k</i>	a.a- a.a	<i>no-?mitú</i> (1.SG-eat) 'I eat'	y	
187	to eat: he has eaten	manger : il a mangé	<i>tsa-me-hāmeté</i>	a-a	<i>tsa-mí a?mitú</i> (3.SG.NON_F-REC/eat) 'He ate'		
188	cassava/manioc	manioc	<i>tadží(hi)ki</i>	a-a	<i>kadžígí</i>	y	
189	bitter manioc/cassava	manioc amer	<i>kā(h)ani</i>	a-a	<i>kaání</i>		
190	manioc beer	chicha de manioc	<i>māghi</i>	a-a	<i>maa?gí</i>		see also 57
191	marsh	marais	<i>hamē(he)tzə</i>	a-Na	<i>gákaámí</i>		
192	to walk: he walks	marcher : il marche	<i>adžápo</i> [cf. chemin]	(see 54)			
193	to walk: he has walked	marcher : il a marché	<i>tidža(h)ar[^]owehene(tehe)</i>				
194	pond; puddle	mare	<i>nikeno(h)omə</i>	a-Na	<i>gákaámí</i>		
195	morning	matin	<i>tsapōkenə</i>	a-a	<i>tsap^hó</i> 'darkness'		expressions corresponding to 'dark' are used for early morning hours in various languages of the region
196	morning: a woman ¹ has come ² this morning ³	matin: une femme ¹ est venue ² ce matin ⁵	<i>nāpie³ ina(a)dr[~]ü¹</i> <i>iputā(a)nū²</i> [cf. demain]	a-a	<i>naapi?é? ...</i> 'morning ...'		
197	bad	mauvais	<i>nikāh(i)otzə</i> [cf. mal]	(see 183)			

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
198	liar	menteur	<i>adžikogēpə</i>	a-Na	<i>ʃoóné</i> ‘lie’		
199	thanks	merci	<i>ka(i)ogi(d)zə</i>	a.a.a- a.a.a	<i>kaʃooʔ gi-i-zú</i> (good/3.SG.NON_F-be) ‘He/it is good’		
200	mother	mère	<i>hahāmé</i>	a-a	<i>aáme</i> ‘mother (vocative)’		
201	honey	miel	<i>potsitza pāku</i>	a.b- b.b.b	<i>íimuu-ʔo-pákó</i> (sweet -CL:OBLON-CL:LIQUID) ‘honey’		stem not identified
202	less	moins	<i>uwēnenə</i>				
203	month	mois	<i>tsanə(ü)bū</i>	b.b- b.b	<i>sá-nuba</i> (one-CL:MONTH) ‘one month’		not attested in contemporary Resígaro, Bora: <i>tsá-nuuʔba</i> (one- month)
204	mountain	montagne	<i>tākahə</i>	b.b- b.b	<i>té-gahú</i> (this-CL:PROTUBE- RATION) ‘(this) hill’		
205	to go up: he goes up	monter : il monte	<i>tsa-hihūwehidžó</i>	a.a- a.a	<i>tsa [...] iʔjú</i> (3.SG.NON_F/go_up) ‘he goes up’		
206	to bite: he bites	mordre : il mord	<i>tsa-héma-ke</i>	a-a	<i>tsa éṃú</i> (3.SG.NON_F/bite) ‘he bites’	y	
207	soft	mou	<i>kāmpí-kə</i>	a-Na	<i>joʔhuuuʔ</i>	y	
208	fly	mouche	<i>hèhéθē, hēhēθē</i>	b-b	<i>heété</i>		
209	small mosquito	moucheron	<i>mapē(he)khī</i>			y	could be a different species
210	to die: he has died	mourir : il est mort	<i>omütsakatane(i)yani</i>	a.a.a- a.a.a	<i>oó-mi tsa kainée zaá-ní</i> (PERF-REC/3.SG.NON_F/be -?) ‘he already died’		
211	mosquito	moustique	<i>kānihitsū(k)</i>	a-a	<i>hanítsó</i>		
212	to be born: he was born	naître : il est né	<i>tsa-hāmihéne</i>	a-Na	<i>gi-kéʔdžó</i> (3.SG.NON_F- be_born) ‘he is born’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
213	nephew (brother's son)	neveu (fils du frère)	<i>no-pe(i)kienowə</i>	a-Na	<i>no-ʔpíitsú, no-ʔkéegí</i> (1.SG-nephew) 'my nephew'		
214	nose	nez	<i>ve-tákhu</i>	a-a	<i>βi-tákó</i> (1.PL-nose) 'our nose'		
215	niece (brother's daughter)	nièce (fille du frère)	<i>no-nàghianawanā(a)ghi</i>	a-Na	<i>eʔpíitsú</i>	y	
216	black	noir	<i>tsafōō-ki</i>	a-a	<i>tsap^hóʔ</i>	y	
217	navel	nombril	<i>w(h)é-podzi</i>	a.a- a.a	<i>βε-ʔp^hódé</i> (1.PL-naval) 'my naval'		
218	no	non	<i>nehēko</i>	a-a	<i>niík^hámí</i>		
219	we	nous	<i>m(w)úhāfū</i>	b-b; a-a	<i>muuuʔá</i> 'we (excl.)'; <i>φú</i> 'we'		
220	cloud	nuage	<i>ēētsǎ</i> [cf. pluie]	a-a	<i>íits^hú</i>		
221	night	nuit	<i>nāpi-heki</i> [cf. demain, soir]	a-a	<i>naapí</i>	y	
222	eye	oeil	<i>wa-tníhə</i>	a.a.b- a.a.b	<i>βá-ŋi-ú</i> (1.PL-eye -CL:ROUND) 'my eye'		<i>-u</i> (<i>-hǎ</i>) is probably a classifier suffix, see 168, 250, 301, 319
223	egg	oeuf	<i>r[˜]ēwi</i>	a- a(.b)	<i>eéβé; eéβé-ú</i> (egg -CL:ROUND) 'egg'		
224	bird: vulture	oiseau : charognard	<i>pēheghi</i>	a-a	<i>peegí</i> 'sparrowhawk'	y	
225	bird: vulture	oiseau : urubu	<i>watsōhoghi</i>	a.a- a.a	<i>βatsóogí</i> 'turkey buzzard'	y	
226	bird: cock	oiseau : coq	<i>atsāghi</i> [cf. mâle]	(see 154)	<i>atsáagígí</i> 'man'	y	

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	gc.	comment
227	bird: hen	oiseau : poule	<i>kar[~]ə(ü)tũ (k)</i>	a-a	<i>kádatú</i>		Bora <i>káraka</i> ; <i>k > t</i> irregular; this form is common in many languages of the region, probably from Tupi, via <i>Lingua Geral</i>
228	bird: <i>paujil</i>	oiseau : paujil	<i>kowĩtsi</i>	a-a	<i>koβĩtsĩ</i>		
229	uncle	oncle	<i>nohō-ghĩé</i>	a-a	<i>no-kĩgĩ</i> ‘my (maternal) uncle’; <i>no-náagĩ</i> ‘my (paternal) uncle’		
230	finger nails	ongles	<i>tsetāwi, tsetāwĩ</i>	a-a	<i>hiʔtáβĩ</i>		
231	ear	oreille	<i>w-o(h)ówĩ</i>	a-Na	<i>henákó</i>		
232	bone	os	<i>w-āpi</i> [cf. <i>jambe</i>]	a-a	<i>β-aápĩ</i> (1.PL-bone) ‘our bone’		
233	yes	oui	<i>hāhahi</i>	a-a	<i>aaĩ</i>		
234	manioc bread	pain (de manioc)	<i>mā(h)amũ(yh)</i>	b-b	<i>maaʔmú</i>		In Bora the source form <i>maʔmá-w</i> (manioc_bread -CL:ROUND) ‘(one) manioc bread’ seems to be archaic or restricted to formal registers, the more common form is <i>maaʔo</i>
235	palate	palais (de la bouche)	<i>wo-nehĩpók</i>				
236	palm tree: <i>aguaje</i>	palmiers : aguaje	<i>itē(he)wĩ</i>	a-a(.b)	<i>iteeβĩ</i> ‘aguaje palm species’; <i>iteeβĩ-ʔé</i> (aguaje -CL:TREE) ‘aguaje palm tree’		
237	to speak: he speaks	parler : il parle	<i>tsa-kiamé</i>	a.a-a.a	<i>tsa kemú</i> (3.SG.NON_F/say) ‘he says’; <i>tsa gi-mú</i> (3.SG.NON_F/3.SG.NON_F-say) ‘he, he says’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
238	to leave: two men ¹ will leave ² tomorrow ³	partir : deux hommes ¹ partiront ² demain ³	<i>nāpie</i> ³ <i>itsā(a)mə</i> ¹ <i>atsagīpi</i> ² [cf. venir]				
239	skin	peau	<i>r^ˆəkumakapedže</i>	a-Na	<i>eémú</i>		Wavrin's form is probably related to the one given by Manuel María de Mataró (number 111), but no corresponding form in contemporary Resígaro or other Arawakan languages found
240	father	père	<i>hahāpě</i>	a-a	<i>aá?pe</i>		
241	small	petit	<i>matso(o)tsə</i>	a-a	<i>mats^hó tsú</i> (short/3.SG.NON_F) 'he/it is short'		
242	granddaughter	petite-fille	<i>epopatsi</i>	a-a	<i>epó?patsi-</i> 'the younger one'		
243	grandson	petit-fils	<i>no-yanihiāni</i>	a.a.a- a.a.a	<i>no-yááni yááni</i> (1.SG-son/son) 'son of my son'		
244	little bit	peu	<i>hidžadža</i>	a-a	<i>oodžadžá?</i>		
245	foot	pied	<i>w-ē(he)pü</i>	a-a	<i>βε-?pú</i> (1.PL-foot) 'our foot'		
246	stone	pierre	<i>nīhisihó</i>	a- Na(.b)	<i>βíjĩ?ó-ú</i> (stone -CL:ROUND) 'stone'		Wavrin's form is very similar to <i>níitsĩ-?ó</i> (tobacco-CL:OBLONG) 'cigarette'
247	pepper	piment	<i>āhatsi</i>	a- a(.b)	<i>aats^hĩ-u</i> (pepper -CL:ROUND) '(one) pepper'		
248	dugout canoe	pirogue	<i>ē(e)tā</i>	a-a	<i>híltá</i>		
249	to cry: he cries	pleurer : il pleure	<i>tsa-mi-kiā(ha)ghi</i>	a-a?	<i>-kání</i> 'cry'	y	

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
250	lead (for hunting)	plomb (de chasse)	<i>hokonighəhə</i>	a.b- a.b	<i>ókóniigí-úú</i> (fire-CL:ROUND) ‘ammunition’; possibly <i>ókóniigí-úúú-hí</i> (fire-CL:ROUND-PL) ‘ammunition’		<i>-úú</i> (<i>-hə</i>) is probably a classifier suffix, see 168, 222, 301, 319
251	rain	pluie	<i>hē(e)tsa</i> [cf. nuage]	(see 220)	<i>ííts^húú ~ ííts^há</i>		
252	more	plus, davantage	<i>hápone</i>	a-a	<i>apouú</i> ‘another time’		
253	fur	poils	<i>wa-tsi(hi)ni</i> [cf. cheveux]	a.a- a.a	<i>βa-tsíimú</i> (1.PL-body_hair) ‘our body hair’		
254	fish	poisson	<i>nodē(h)efmá</i>	a-b.a	<i>ámoo-gí</i> (fish-3.SG.NON_F)		
255	breast	poitrine	<i>wé-wāhōho</i>	a.b- a.b	<i>βe-βáφó-?ó</i> (1.PL-body-CL:OBLONG) ‘our rib’		
256	to lay: she lays	pondre : elle pond	<i>hēwenedžə</i>	a-a	<i>eéβe</i> [...] ‘egg [...]’		
257	to possess: he possesses	posséder : il possède	<i>kinēhēkitsehiyhə</i>	a-a	<i>gí-?ñé</i> [...] (3.SG.NON_F-poss) ‘his thing(s)’		since there is no verb ‘possess’ in Resígaro it is likely that ‘to possess’ would be expressed with the form <i>gí-?ñé</i> ‘his thing(s)’
258	pot	pot	<i>hēθāni, hēθ(i)ā(a)ni</i>	a-a.b	<i>itsaa?ni-?idžó</i> (pot-CL:POT) ‘(clay) pot’		
259	louse	pou	<i>n(h)etēisi</i>	a- a.(b)	<i>netets^h-?ó</i> (louse-CL:ROUND) ‘louse’		form without the classifier can probably be used as collective/generic
260	beam	poutre	<i>awanapə</i>	a.b- a.b	<i>aβáana-búú</i> (wood-CL:LOG) ‘(wooden) log/beam’		derived form not attested in contemporary Resígaro, but derivation of nouns denoting beams with <i>-búú</i> (CL:LOG) is highly regular
261	can: I can	pouvoir : je peux	<i>no-potə</i>	a.a.a- a.a.a	<i>no-po-t^húú</i> (1.SG-grow-CAUS) ‘I make grow’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
262	to take: he takes	prendre : il prend	<i>ekēpi-kə</i>	b.a.a- b.a.a	<i>ekē? pi-k^hú</i> (grab/2.SG-do) 'take!, you take'		
263	to take: he has taken	prendre : il a pris	<i>tsā-mi-hitsone</i>	a-Na	<i>gi-to?βú</i> (3.SG.NON_F-take) 'he takes'		
264	to take: he has married	prendre : il a pris femme	<i>onopāha(ih)</i>	a-Na	<i>gi-to?βa?kaa?nú</i> (3.SG.NON_F-get_married) 'he gets married'		
265	close	près	<i>a(i)džanā(a)ghi</i>	a-a	<i>aidžánú?</i>	y	
266	flea	puce	<i>tawātsi</i>	a-a	<i>ka?βátsí</i>		
267	puma	puma	<i>ki(h)ēr[˘]ó</i>				this Resígaro form not attested in contemporary Resígaro, it corresponds to Manuel Maria de Mataró's item number 128 'jaguar'
268	who?	qui ?	<i>kihēnī</i>	a-a	<i>kéení, kéhee</i>		
269	root	racine	<i>katsōghə</i>	a-b.b or a- b.a	<i>té-baké; té-?ipí</i> (this-CL:ROOT) 'root'	y	Wavrins form is very similar to <i>kásoo-gú</i> (grate-CL:PLANK) '(manioc) grater', which would be a regular correspondence of Bora <i>kaatso-g^wa</i>
270	rapidity	rapidité	<i>notsēhihū</i>	a-Na	<i>kapí</i> 'fast'		
271	to refuse: I refuse	refuser : je refuse	<i>nika(i)he-dženo-kə</i> [cf. <i>vouloir</i>]	a.a- a.a	<i>ní [...] no-k^hú</i> (no/1.SG-do)		
272	fox	renard	<i>(h)ihāw(h)ó</i>	a-Na	<i>itsígí</i> 'fox, opossum'		
273	to laugh: he laughs	rire : il rit	<i>kiñedz(h)ə</i>	a-Na	<i>gi-k^honí</i> (3.SG.NON_F-laugh) 'he laughs'		
274	river	rivière	<i>θehe(y)hí</i>	b.b- b.b	<i>teé-?í</i> (this-CL:RIVER) 'this) river'		
275	rice	riz	<i>himiitzi</i> [cf. <i>herbe</i>]	(see 150)			

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
276	red	rouge	<i>kierawedžowi</i>	a-a	<i>kedáβííʔ</i>		
277	rainy season	saison des pluies	<i>kotsehewə</i>	a.b- Na.b	<i>ats^hímút^hé-bú</i> (rain? -CL:SEASON) ‘rainy season’		- <i>bu</i> is regularly used as a classifier in terms for seasons of the year in both Bora and Resígaro
278	dry season	saison sèche	<i>kāmĩ</i> [cf. année]	(see 12)			
279	blood	sang	<i>hedr[˘]ũ</i>	a-a	<i>íídú</i>		
280	salt	sel	<i>kanamāha</i>	b-b	<i>kanaamá-</i>		<i>káánámaá</i> in Bora refers only to white people’s salt, this form is common in many languages of the region, but its origin is unknown.
281	week	semaine	<i>kə(ü)džakāmě</i>				
282	to feel: he feels	sentir : il sent	<i>epopepitahāne</i>				
283	to feel: he has felt	sentir : il a senti	<i>tsa-mi-džikahā-ki</i>			y	
284	snake: boa	serpents : boa	<i>patsow(h)ūití</i>	a-a	<i>patsoβíité</i>		
285	snake: kind of boa	serpents : boa de terre	<i>patsow(h)ūití</i>	(see 284)	<i>patsoβíité</i>		
286	snakes : viper	serpents : serpent venimeux	<i>kimakihēki</i>			y	
287	sister	soeur	<i>n(h)épōphə</i>	a.a- a.a	<i>n-époóʔú</i> (1.SG-sister) ‘my sister’		
288	thirst: he is thirsty	soif : il a soif	<i>tsa-mi-hěketsi</i>				
289	evening	soir	<i>nāapě</i> [cf. demain, nuit]	a-a	<i>naapí</i> ‘night’		
290	sun	soleil	<i>hahĩ</i> [cf. ciel]	(see 60)	<i>háʔĩ</i>		
291	sorcerer	sorcier	<i>ka(t)tahāpũ</i>	a-Na	<i>kanívakáagí</i> ‘shaman, witch doctor’		
292	to go out: he goes out	sortir : il sort	<i>tsa-gipanə(u)kihōihēhe</i>	a-Na	<i>φítsoʔ gi-k^hú</i> (go_out/3.SG.NON_F-do) ‘he goes out’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
293	source; spring	source	<i>honihéhə</i> [cf. eau, lac]	a.b- a.b	<i>hooní-?éhuú</i> (water -CL:HOLE) ‘spring’		
294	deaf	sourd	<i>nenonokoh(i)ēhə</i>	a.a.b- a.a.b	<i>níí no-náko-?éhuú</i> (no/1.SG- ear-CL:HOLE) ‘no ear’		derived form not attested in contemporary Resígaro, but regularly derived
295	sweat	sueur	<i>hadžápene</i> [cf. chaleur]	a-a	<i>hedžápenú</i> ‘to sweat’		
296	aunt	tante	<i>tā(h)adži</i>	b-b	<i>taádže</i> ‘grandmother’		also used as an honorific for any older woman
297	tapir	tapir	<i>a(d)nō(h)okĩ</i>	a-a	<i>aṇóogi</i>	y	
298	termite	termite	<i>m(w)ōmohe</i>	a-Na	<i>kamaádú</i>		Wavrin’s form is possibly related to <i>monóotsí</i> ‘aneater’
299	the earth	terre	<i>hepohə</i> [cf. argile]	a.b- a.b	<i>hípo-hí</i> (earth-CL:DISC) ‘earth’		
300	testicles	testicules	<i>wa-wā(a)kũ</i>	a.a.b- a.a.b	<i>βa-?vaa-kũ</i> (1.PL-testicle -DL) ‘our testicles’		<i>ja?va</i> ‘testicle’ attested in Seifart (2009); vowel length before <i>-kũ</i> regular
301	head	tête	<i>w(h)e-bə(ü)he</i>	a.a.b- a.a.b	<i>φá-βe-ú</i> (1.PL-head -CL:ROUND) ‘our head’		<i>-ú (-he)</i> is probably a classifier suffix, see 168, 222, 250, 319
302	to suckle: he suckles	téter : il tette	<i>tekotatzə</i>	a-Na	<i>soo? gi-k’hú</i> (suck/3.SG.NON_F-do) ‘he sucks’		
303	to weave: I weave	tisser : je tisse	<i>no-yākĩ</i>	a.a.a- a.a.a	<i>no-?ya-gi</i> (1.SG-waeve -3.SG.NON_F) ‘I weave it’	y	<i>-gi</i> added hypothetically, would not be used in contemporary Resígaro
304	tomb	tombeau	<i>nikihehə</i>	a-Na or b.b- b.b	<i>nigónoomú</i> ‘tomb’		<i>níkehé-hú</i> is not attested in contemporary Resígaro but would be the regular correspondence of Bora <i>ní^hk’ehé-hw</i> (tomb -CL:TUBE) ‘tomb’
305	thunder	tonnerre	<i>hēnú</i>	a-a	<i>eénú</i>		

#	English	French	Resigaró (Bora shaded)	sum.	contemp. Resigaró (Bora)	sg.	comment
306	all	tous	<i>pā(h)aně</i>	b.b.a- b.b.a	<i>pá-?a-ŋa</i> (all-PL-REST) ‘all’		
307	to cough: he coughs	tousser : il tousse	<i>tsa-me-kāhě-kə</i>	a-Na	<i>ehe? gi-k^hú</i> (cough/3.SG.NON_F-do) ‘he coughs’		
308	you	tu	<i>phá</i>	a-a	<i>p^hú ~ p^há</i>		
309	to kill: you (pl.) kill	tuer : vous tuez	<i>tabanā(ha)-ki</i>	a-Na	<i>kainée i-k^hú</i> (dead/2.PL-do) ‘you kill’	y	
310	urine	urine	<i>nō(h)-m(h)ó</i>	a-Na	<i>no-?ŋaaní</i> (1.SG-urine) ‘my urine’		
311	to urinate: I urinate	uriner : j’urine	<i>anenenōpe</i>	a.a.a- a.a.a	<i>a?né-ŋé no-?pí</i> (urinate -PURP/1.SG-go) ‘I go to urinate’		
312	to urinate: I have urinated	uriner : j’ai uriné	<i>tsa-me-(h)āān(h)í</i>				
313	to sell: he sells	vendre : il vend	<i>tsa-(h)āki</i>	a-Na	<i>gi-kone</i> (3.SG.NON_F-sell) ‘he sells’	y	
314	to come: he comes	venir : il vient	<i>ketsatsanā-ki</i>	a-a	<i>gi-tsa?ná</i> (3.SG.NON_F-come) ‘he comes’	y	
315	to come: he has come	venir : il est venu	<i>tsa-kemi tsahahēne</i>				
316	to come: a man ¹ came ² yesterday ³	venir : un homme ¹ est venu ² hier ³	<i>nukutsa³ atsaghi¹ hikutā(nă)²</i> [cf. partir]	(see 152)			
317	to come: a woman ¹ has come ² this morning ³	venir : une femme ¹ est venue ² ce matin ³	<i>nāpie³ ina(a)dr^hü¹ iputā(a)nū²</i>				
318	wind	vent	<i>fōghikə</i>	a-a	<i>φoo gik^hú</i> ‘he/it blows’		
319	belly	ventre	<i>wa-wáfohe</i>	a.a.b- a.a.b	<i>βa-βáφo-ú</i> (1.SG-interior -CL:ROUND)		<i>-u (-he)</i> is probably a classifier suffix, see 168, 222, 250, 301
320	penis; rod	verge	<i>wa-waní</i>				

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	sg.	comment
321	green	vert	<i>wə(ü)gitsé</i>	a-Na	<i>ipogí?</i>		
322	meat	viande	<i>tāwamini</i>	a-Na	<i>píjaaní</i>		
323	old man	vieillard ♂	<i>hāa(i)ghihodžə</i>	a.a- a.a	<i>p^hai-gí oó tsú</i> (old-3.SF.NON_F/PERF/3.SG.NON_F) ‘he is already old’		
324	old woman	vieillard ♀	<i>fa(i)pidž(h)ětsə</i>	a.b- a.b	<i>p^hai-pidže tsú</i> (old-F.SG/3.SG.F) ‘she is an old woman’		
325	to grow old: I have grown old	vieillir : j’ai vieilli	<i>wē(h)yə(h)</i>				<i>βe-yú</i> (1.PL-be) ‘we were’ is often used in narrative to mean ‘we became old’
326	to live: we live	vivre : nous vivons	<i>tə(w)tə(w)pi-kə</i>				
327	to see: he sees	voir : il voit	<i>khewi-kí</i>	a-Na	<i>gi-ts^héní</i> (3.SG.NON_F-see) ‘he sees’	y	Wavrin’s form could be <i>ke?vígí</i> ‘chief’, which could be understood as ‘one who sees’
328	to see: he has seen	voir : il a vu	<i>tsa-tsēni</i>	a.a- a.a	<i>tsa ts^héní</i> (3.SG.NON_F/see) ‘he sees’		
329	to fly (with wings): he flies	voler (avec des ailes) : il vole	<i>adr^howē(he)-k(i)</i>	a-a	<i>adú</i> ‘to fly’	y	
330	to want: I want	vouloir : je veux	<i>hiadži-dže(hi)ono-kə</i> [cf. refuser]	a-Na	<i>kaafo-dža?i no-k^hú</i> (good-? 1.SG-do) ‘I like/I want’		
331	you (PL)	vous	<i>hāha</i>	a-a	<i>ha-?á</i> (2.PL-PL) ‘you (pl)’		
332	vulva	vulve	<i>nadiwākú</i>	a.b- ?b	<i>-gú</i> (CL:PLANK)		stem not identified; <i>-gú</i> is semantically likely to be used with this term
333	one	1	<i>apā(ha)pěně</i>	a-b.a	<i>sa-gí</i> (one- SG.NON_F)		
334	one: first	1: premier	<i>ə(ü)pó(hi)hēmi</i>	a-Na	<i>patop^hé</i> ‘first’		
335	two	2	<i>e(i)tzāmo</i>	a- b.b.b	<i>mi-gaa-kú</i> (two-CL:PLANK-DL) ‘two (e.g. planks)’		

#	English	French	Resígaro (Bora shaded)	sum.	contemp. Resígaro (Bora)	gc.	comment
336	two: two men ¹ will leave ² tomorrow ³	2: deux hommes ¹ partiront ² demain ³	<i>nāpie</i> ³ <i>itsā(a)mə</i> ¹ <i>iputā(a)nũ</i> ²	/			
337	two: second	2: second	<i>miwatsile(t)zaoki</i>	a or b.a.b- b.b.b	<i>mi-CL-ku</i> (two-CL-DL) 'two'		very hypothetical whether Wavrin's form contains these Bora elements
338	three	3	<i>eitzāmo-apo</i>	a- b.b.b	<i>mi-gaa-kú sa-gú</i> (two -CL:PLANK-DL/one -CL:PLANK)		
339	four	4	<i>eitzamo-e(i)tzamo</i>	a- Na.b. b	<i>poʔtsááβá-gaa-hí</i> (center -CL:PLANK-PL) lit. middle finger		
340	five	5	<i>dzāhodze</i>	b.b- b.b	<i>sá-ʔosi</i> (one-CL:HAND)		
341	ten	10	<i>pāhodzikə</i>	b.b- b.b	<i>pá-ʔosí-ku</i> (all-CL:HAND -DL)		

6. Bora elements in a wordlist from the 1930s

This chapter presents full annotation of the wordlists provided by Manuel María de Mataró (no date). As noted in Section 2.2, above, this list combines three wordlists, two by Javier de Barcelona and one by Plácido de Calella. The sources are indicated by “B1” and “B2” for Javier de Barcelona and “C” for Plácido de Calella in the original manuscript, as in its representation below. The column “Resígaro (Bora material shaded)” represents Resígaro material as closely as possible to the way it is presented in Manuel María de Mataró (no date). This includes the location of transcription symbols at various horizontal levels. The meaning of this positioning of symbols is not always clear. In some cases, it appears to represent various possible transcriptions, where the transcriber was not sure which symbol to choose, for example item number 4, *e* or the (raised) *i*. In other cases, raised symbols are probably meant to combine with non-raised ones, as in item 21, where a raised *v* would combine with *c*, forming *č* (see also the reproductions of the photographs of a carbon copy of the original manuscript by Manuel María de Mataró (no date) in the appendix). Recall from Section 2.2 that the transcription in these wordlists is sometimes Spanish-based. This concerns in particular the representation of [h] which is represented according to local Spanish pronunciation as *j*. The column “Spanish” is also directly copied from Manuel María de Mataró (no date).

The other columns contain annotations added by me. The column “sum[mary of comparison]” notes how the Resígaro form given by Manuel María de Mataró (no date) compares to contemporary Resígaro forms, using the abbreviations explained in Table 10, above. The column “contemp[orary] Resígaro (Bora)” contains contemporary Resígaro forms corresponding to those given by Manuel María de Mataró (no date). The identification of these correspondences in this list was somewhat more complicated than the identification of those in Rivet & Wavrin’s (1951) data because of some problems that apparently arose during data collection, such as confusion of person reference. In a number of cases, such as in item 8, the Spanish translation given by Manuel María de Mataró (no date) is a phrase with a third person subject, but the Resígaro form quite clearly has a first person subject.

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
1	water	agua	jó ^o ne (B1)	a-a	hooní	
2	walk: he walks	andar: el anda	appáko íp pi (B2)	a-a	[...] i?pí 'go'	
3	walk: he walked	andar: el anduvo	appáko opemenop ^{í í} pi (B2)	a.a- a.a	oó-pe [...] i?pí (PERF-REM [...] go)	
4	that	aqué ^l	keé ⁱ (C); guakká ^k ge (B2)	a-a	kée- (who/what)	
5	tree	arból	abán ^(ne) (B1)	a-a.b	abáana-?e (wood-CL.TREE) 'tree'	
6	bow (my?)	arco, (mi?)	nóubé ^{tno} (B1)			
7	yesterday: yesterday ¹ a man ² came ³	ayer: ayer ¹ vino ² un hombre ³	nukúte ¹ nékuta ² atátge ⁱ (X/C)	a.a.a- a.a.a	nokótsá atsáagí i?kotanú (yesterday/man/arrive) 'yesterday a man arrived'	
8	go down: he goes down	bajar: él baja	appaka jipponóppe ⁱ (B2)	a.a- a.a	[...] hipóo no-?pí (below/1.SG-go) 'I go below'	
9	go down: he went down	bajar: él bajó	appako opime ⁱ jip pó (B2)			
10	drink	beber	no ^(ót) no ^t e ^d (B1)	a.a- a.a	no-?dú (1.SG-drink) 'I drink'	
11	drink: he drinks	beber: él bebe	appa ná ^{ost} nó dá (B2)	a.a- Na.a	gi-?dú ~ gi-?dá (3.SG-drink) 'he drinks'	
12	drink: he drank	beber: él bebió	ope me ^{i i} nó ^{ost} da (B2)			
13	white	blanco	jef fíni (B1)	a-a	heφíí?	
14	mouth (my)	boca (mí),	no ^v nénni (B2)	a-Na	nó-no (1.SG-mouth) 'my mouth'	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
15	arm (my)	brazo (mí),	no ná bpe (B2)	a-a	<i>no-ʔnáapí</i> (1.SG-arm) ‘my arm’	
16	wizard	brujo	nó nníe (B2)	a-Na	<i>kaníʔakáagí</i>	
17	hair (my)	cabellos (mis),	noté nnä (B2)	a.a- a.a	<i>no-tsíinú</i> (1.SG-hair) ‘my hair’	
18	head (my)	cabeza (mi),	nou b e (B1) ; no ^v b b e (B2)	a-a.b	<i>nó-ʔe-ú</i> (1.SG-head -CL:ROUND) ‘my head’	
19	alligator	caimán	pek gínne (B1)	a-a	<i>pegúinú</i>	
20	heat	calor	nutj ^v áp pe ⁿ ne (B2)	a-Na	<i>haʔmo</i>	no similar form in contemporary Resígaro, but see Wavrin’s <i>adžápené</i> ‘heat’ (number 49)
21	path: I ⁴ saw ⁵ three(men) ¹ - 2 on the path ³	camino: tres(hombres) ¹⁻² en el camino ³ yo ⁴ vi ⁵	itamá ¹ apáko ² ^v acapóki ³ no ⁴ tsémi ⁵ (C)	a.a.a- a.a.a	[...] <i>adžápó-gí no-ts^béni</i> (path-LOC/1.SG-see) ‘I saw on the path’	
22	canoe	canoa	j itte (B1)	a-a	<i>hiítú</i>	
23	captain	capitán	ⁱ ⁱ k ebek ge (B2)	a-a	<i>keʔbígí</i>	
24	house	casa	^{ive} pan ec (B1)	a-a	<i>paníitsi</i>	
25	manioc bread	casabe	máama (C) ; maame (B1)	b-b	<i>maaʔmú</i>	In Bora the source form <i>maʔmá-u</i> (manioc_bread -CL:ROUND) ‘(one) manioc bread’ seems to be archaic or restricted to formal registers, the more common form is <i>maáʔo</i>

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
26	eyebrows	cejas	nonnek ^g áje (B2)	a.a.b- a.a.b	<i>nó-ŋi-gahú</i> (1.SG-eye-CL:PROTUBERATION) ‘my eyebrow’	
27	red	colorado	ket ^t óbe ⁱ _d (B1)	a.a	<i>kedáβíí?</i>	
28	eat	comer	guamitán (ni) (B1)	a.a- a.a	<i>d-a?mitáá-ní</i> (3.SG.NON_F-eat-?) ‘he eats’	
29	eat: he eats	comer: él come	appáko no ^o mittä (B2)	a.a- a.a	<i>d-a?mitú</i> (3.SG.NON_F-eat) ‘he eats’	
30	eat: he ate (yesterday)	comer: él comió(ayer),	ope ⁱ míno ^o mittä (B2)	a.a- a.a	<i>oó-pé [...] no-?mitú</i> (PERF-REM/1.SG-eat) ‘I already ate’	
31	eat: a man ¹ ate ² a jaguar ³	comer: un hombre ¹ comió ² el tigre ³	atátge ⁱ kíkice ^v ínni ³ (C)	a.a.a- a.a.a	<i>atsáagi [...] i?tú íní</i> (man/eat/jaguar) ‘the man ate the jaguar’	
32	eat: you ¹ , eat ² manioc bread ³	comer: tu ¹ come ² casabe ³	pa ¹ míta ² máama ³ (C)	a.a.b- a.a.b	<i>pa-?mitá maa?mú</i> (2.SG-eat/casabe) ‘you eat casabe’	see 25
33	eat: all of you ¹ , eat ² banana ³	comer: todos ¹ coman ² plátano ³	páana ¹ míte ² siakó ^v ge (C)	b.b.a- b.b.a	<i>pa-?a-ŋá a?mitá fakoo?gí</i> (all-PL-REST/eat/banana)	
34	neck (my),	cuello (mi),	ñónnotje ^v (B2)	a.a- a.a	<i>no-ŋotí</i>	
35	tapir	danta	atnóge (B1)	a-a	<i>anoógi</i>	
36	say: he says	decir: él dice	appáko pikéte (B2)	a-a	<i>[...] ké?tsú</i> ‘[...] says’	
37	say: he said (yesterday)	decir: él dijo(ayer),	appáko ópemepikéte ⁱ (B2)	a-a	<i>[...] ké?tsú</i> ‘[...] says’	
38	finger (my)	dedo (mi),	nokkétge (B2)	a.a.b- a.a.b	<i>no-ké-gú</i> (1.SG-hand-CL:PLANK) ‘my finger’	
39	wake up: he wakes up	despertarse: él se despierta	appáko odrappón ne (B2)	a.a- a.a	<i>[...] d-apoonú</i> (3.SG.NON_F-wake up) ‘he wakes up’	
40	wake up: he woke up	despertarse: él se despertó	appáko opimenappón ne. ⁱ (B2)	a-a	<i>[...] apoonú</i> ‘[...] wakes up’	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
41	tooth (my)	diente,(mi),	nonnéjje (B1)	a.a.b- a.a.b	<i>no-né-hí</i> (1.SG-tooth -CL:DISC) ‘my tooth’	
42	teeth (my)	dientes(mis),	nonnéjje ⁱ (B2)	a.b.b- a.b.b	<i>no-né-hí-hí</i> (1.SG-tooth -CL:DISC-PL) ‘my teeth’	Allin (1976:436) gives <i>oné-ne</i> (tooth-PL), i.e. a plural form with native Arawakan <i>-ne</i> , used for humans and body parts. If the borrowed plural marker <i>-hi</i> is correctly identified here, then 1930s data is more influenced by Bora than 1970s data
43	sleep: he sleeps	dormir: él duerme	appako óma ^{ák} ge (B2)	a-a	<i>imú</i> ~ <i>imá</i> ‘sleep’	could be <i>ima-gi</i> (sleep -3.SG.NON_F), but subject suffixes not attested in contemporary Resígaro
44	sleep: he slept	dormir: él durmió	opime ^í appáko ^{im} ma (B2)	a-a	[...] <i>imú</i> ‘[...] sleeps’	
45	he	él	éki (C); appáko (B2)	a-Na or a.a- a.a	<i>tsú</i> ; <i>-gi</i> (3.SG.NON_F)	é- not identified, but Bora <i>e-</i> is a root forming distal demonstratives; see also 46
46	she	ella	épic ^v i (C)	a.b- a.b	<i>-pidze</i> (3.SG.F)	é- not identified, but Bora <i>e-</i> is a root forming distal demonstratives; see also 45
47	they	ellos	seé ^k genne (B2)	a-Na	<i>nú</i> ; <i>miá</i>	could be <i>sí-gi-né</i> (other -NON_F.SG-PL) ‘others’ although the usual form to express ‘others’ in contemporary Resígaro is <i>sí-?ú</i> (other-PL) ‘others’

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
48	get in: he gets in	entrar: él entra	appáko nōte neté notá ^{no} (B2)	a-Na	<i>gi-βáño</i> (3.SG.NON_F-enter) 'he enters'	
49	get in: he got in (yesterday)	entrar: él entró (ayer),	appáko opeme notá ^{i i} (B2)	a-Na		
50	that	ése	koé ⁱ (C)	a-a	<i>giʔi</i> 'that'	
51	back (my)	espalda,(mi),	nobákkō (B2)	a-a	<i>-noβáakó</i> 'shoulder'	<i>-ko</i> is reminiscent of the classifier <i>-ko</i> (CL:POINTED), but probably not a segmentable form here (see Allin 1976:454)
52	this	este	keé ⁱ (C); geé ⁱ (B2)	a-a	<i>giʔi</i>	
53	star	estrella	ét ^{no} (B1)	a-Na	<i>hiβúgi</i>	
54	arrow	flecha	téboko (B1)	b.b- b.b	<i>tubó-ko</i> (shoot -CL:POINTED) 'arrow'	not attested in contemporary Resígaro, but <i>tubó-ko</i> (shoot -CL:POINTED) would be a regular correspondence of Bora <i>tubóo-ko</i> 'arrow'
55	cold	frío	jippegetse (B2)	a.a.a- a.a.a	<i>hiʔpíʔ-gi tsú</i> (cold -3.SG.NON_F/3.SG.NON_F) 'he/it is cold'	
56	fire	fuego	okonég (B1)	a-a	<i>ókóniigi</i>	
57	big	grande	atnépö (B1)	a-a	<i>aņepú</i> 'much'	
58	macaw (parrot)	guacamayo(papagayo),	atnátdo (B2)	a-a	<i>anáadó</i>	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
59	ax	hacha	ⁱ eppí ^v c (B1)	a-a	<i>epíits^hi</i>	
60	brother	hermano	nonnáge (B2)	a-a	<i>nó-náagi</i> (1.SG-brother) ‘my brother’	
61	daughter	hija	tíyāyíá (B2)	a-a	<i>-i?dzaání</i> ‘son/daughter’	
62	son	hijo	^{án} piia ni (B2)	a-a	<i>pi-?dzaání</i> (2.SG-son) ‘your son/daughter’	
63	man	hombre	ⁱ atátge (C)	a-a	<i>atsáagi</i>	
64	man (in general and also referring to male). See Indian	hombre (en general y también refiriéndose al varón). véase indio	atáge (B2)	a-a	<i>atsáagi</i>	
65	Indian	indio	itnabiyániki (C); ^{dä} itnát (B2)			
66	rainy season	invierno	^s anapé fá’ve (B2)	a-a	<i>φá?βú</i> ‘rain’	
67	go: he goes	ir: él va	ⁱ appáko ó íp p (B2)	a.a- a.a	<i>[...] oó i?pi</i> (PERF/go) ‘[...] already went’	
68	go: he went (yesterday),	ir: él fué(ayer),	^{i i} opeme apákoíp pi (B2)	a.a- a.a	<i>[...] oó-pe i?pi</i> (PERF-REM/go) ‘[...] already went’	
69	leave: tomorrow ¹ two(men) ² will leave ³	ir: mañana ¹ se irán ² dos(hombres) ³	apan ¹ náipi ² itámä ³ (C)	a.a.a- a.a.a	<i>aápaḡá naapi?é? [...]</i> (tomorrow/morning) ‘tomorrow morning’	
70	leave: tomorrow ¹ two ² women ³ will leave ⁴	ir: mañana ¹ se irán ² dos ³ mujeres ⁴	^v apan ¹ náipi ² mipitcékei ³ itnáttron ⁴ (C)	a.b.b- a.b.b	<i>aápaḡá naapi?é? mi-pidze- ku ináadó</i> (tomorrow/morning/two -F.SG-DL/woman) ‘tomorrow morning two women’	

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
71	tongue (my)	lengua(mi),	noujéppe (B1); no ^u jébpé (B2)	a.a- a.a	<i>no-ʔhépe</i> (1.SG-tongue) 'my tongue'	
72	moon	luna	keékge (B1); ké ^{ét} ge (B2)	a-a	<i>keégi</i>	
73	moon: one moon	luna: una luna	appákoma ké ^{ét} ge (B2)			
74	moon: two moons	luna: dos lunas	itama ké ^{ét} ge (B2)			
75	leave: after two moons he leaves	ir: despues de dos lunas se va,	itamäne ^{ip} pi ké ^{ét} ge (B2)			
76	corn	maíz	be' kkä (B1)	a-a	<i>βééká</i>	
77	bad: bad ¹ the banana ²	malo:malo ¹ el plátano ² ,	matébane ^v siakō. (C)	a.a- a.a	<i>mats^híβaʔnú fakoo(ʔgi)</i>	
78	mother	mamá	áp a ^{pe} (B2)	a-a	<i>aápe</i> 'father'	mother is <i>aáme</i> , see 102
79	hand (my)	mano(mi),	noukeáosi (B1); i nokkeáose (B2)	a.a.b- a.a.b	<i>no-ke-ósí</i> (1.SG-hand -CL:HAND) 'my hand'	- <i>ké</i> in Allin (1976), i.e. a form without the Bora classifier. Note that this borrowing is attested in two sources (B1 and B2).
80	tomorrow	mañana	apan (C)	a-a	<i>aápaná</i> 'tomorrow'	
81	in the morning	mañanaita	napiéke ? (C)	a-a	<i>naapiʔéʔ</i> 'morning'	
82	husband	marido	^{u v} rotcítki (C)	a.a- a.a	<i>do-dʒígí</i> (3.SG.F-husband) 'her husband'	
83	monkey	mono	kapátdo (B1)	a.a	<i>kapáadó</i> 'woolly monkey (<i>Lagothrix lagothricha</i>)'	
84	die: he died	morir: él murió	appáko o akkájo ^v (B2)	a-Na	<i>kainée gi-yú</i> (dead/3.SG.NON_F-be) 'he died'	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
85	woman	mujer	itnátro (C); itnát ^v do (B1); no ^{ón} no (B2)	a-a and a-a	<i>ináadó</i> ‘woman’; <i>no-ónó</i> (1.SG-wife) ‘my wife’	
86	woman: indian woman	mujer: mujer india	itnát ^{dä} (B2)	a-a	<i>ináadó</i>	
87	woman: in the morning ¹ a woman ² arrived ³	mujer: mañanita ¹ llegó ² una mujer ³	napiéke ¹ rókuta ² itnátro ³ (C)	a.a.a- a.a.a	<i>naapi?é? do-?kotaá ináadó</i> (morning/3.SG.F-arrive/woman) ‘in the morning a woman arrived’	
88	nose (my)	naríz(mi),	nottákko (B2)	a-a	<i>no-tákó</i> (1.SG-nose) ‘my nose’	related to Arawakan <i>*hitaku</i> (Ramirez 2001:703), i.e. <i>-ko</i> is not a classifier
89	black	negro	tápo ^v (B1)	a-a	<i>tsap^hó?</i>	
90	child	niño	zaánne ^v (B2)	a-a	<i>dʒaánú</i>	
91	we: I and you	nosotros: yo y tú	nó-pá (C)	a-a and a-a	<i>no</i> ‘I’; <i>p^ha</i> ‘you’	
92	we: all	nosotros: todos	páani (C); ne ⁱ k ⁱ gí ⁱ (B2)	b.b.a- b.b.a	<i>pa-?a-?nú</i> (all-PL-REST) ‘all’	
93	cloud	nube	tápo ^v be (B2)	a-Na	<i>-íts^hú</i>	
94	hear: he hears	oir: él oye	appáko nó ^o mö, (B2)	a.a- a.a	[...] <i>nó-?mú</i> (1.SG-hear) ‘I hear’	

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
95	hear: he heard (yesterday)	oir: él oyó (ayer),	appáko ope me ^{i í} nó mō ^o (B2)	a.a- a.a	[...] nó-?mú (1.SG-hear) ‘I hear’	
96	eye (my)	ojo(mi)	nonne ^{cj} (B1); nó ne ^{u i} j (B2)	a.a.b- a.a.b	nó- ^{ni-ú} (1.SG-eye -CL:ROUND) ‘my eye’	
97	smell: he smells	oler: él huele	appáko sisíno ^k ke (B2)	a.a- a.a	[...] síi? no-k ^h ú (smell/1.SG-do) ‘... I smell’	
98	smell: he smelled (yesterday)	oler: él olió(ayer),	appáko opemesí ^{i i} nó ke ^k (B2)	a.a- a.a	[...] síi? no-k ^h ú (smell/1.SG-do) ‘... I smell’	
99	pot	olla	beníti (B2)	a- Na.b	itsaa?ni-?idzó (pot-CL:POT) ‘(clay) pot’	
100	ear	oreja	noóbe (B1); no ^{o i i} bemeo (B2)	a.b- Na	henákó	-mi?o classifier not in Allin’s (1976) data, but -mi?o is the regular correspondence of Bora -mí?o/-mi?o, classifier for shell, etc., used also in núúú-mi?o ‘ear’ in Bora; nobe is a reflex of Arawakan *(u?u)wi (Ramirez 2001:705-706), which is not attested in contemporary Resigaró
101	bird	pájaro	kobéte (B1)	a-a	ko?pídú	
102	father	papá	á’ a mi (B2)	a-a	aáme ‘mother’	aa?pe is father, see 78
103	parrot, cf. macaw	papagayo, cf. guacamayo				
104	chest (my)	pecho(mi),	no kottáppe (B2)	a.-a.b	no-?kotápi-gú (1.SG-chest -CL:PLANK) ‘my chest’	
105	small	pequeño	ót ^{v v} c c (B1)	a-a	oodzadzá ‘a little’	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
106	fish	pescado	ám̃mo (B1)	a-a.a	ám̃o-gí	
107	eyelashes	pestañas	notsótte (B2)	a-Na.a	nó-ŋi-ʔaaβwí (1.SG-eye-side) ‘my eyebrow’	
108	dog	perro	iitni (B1)	a-a	íiní	
109	foot (my)	pié(mi)	nó kpe (B1); nókpaté ^{eg} (B2)	a.a-a.a	noʔ-pú (1.SG-foot) ‘my foot’; no-ké (1.SG-hand) ‘my hand’	
110	stone	piedra	b-ísio ^v _f (B1)	a-a.b	βíjĩʔó-ú (stone-CL:ROUND) ‘one stone’	this stem can probably be used without a classifier as a generic term in contemporary Resígaro also
111	skin (my)	piel(mi)	nokapétte (B2)	a-Na	eémú	Manuel María de Mataró’s form is probably related to the one given by Wavrin (number 239), but no corresponding form in contemporary Resígaro or other Arawakan languages found
112	leg (my)	pierna(mi)	nokkábaŷ (B2)	a.a.b-a.a.b	no-kaaβa-i (1.SG-leg-CL:STICK) ‘my leg’	
113	banana	plátano	siakó ^v _{ge} . (C)	a-a(b)	fakooʔgí-ʔó (banana-CL:OBLONG) ‘the banana’	this stem can be used without a classifier as a generic term in contemporary Resígaro also
114	banana: bad ¹ the banana ²	plátano: malo ¹ el plátano ²	matébane ¹ siakó ^v _{ge} . (C)	a.a.a-a.a.b	mats ^h ʔbaʔnú fakooʔgí-ʔó (bad/banana-CL:OBLONG) ‘the banana is bad’	

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
115	who	quién	kegén c c (C); k ⁱ éjé (B2)	a-a	kéeni 'who'	
116	knees (my)	rodillas (mis),	notónnaa ^e (B2)	a.a.b- a.a.b	no-?dóna-tú (1.SG-knee -CL:ROUND) 'my knee'	The letter <i>e</i> in Manuel María de Mataró's form is identified with -tú (CL:ROUND). It is unlikely that this is a plural form (as Manuel María de Mataró's gloss suggests), since the ending should be -túúhí or -né
117	tasty, cf. banana	sabroso, cf. plátano				
118	go out: he goes out	salir: él sale	appáko o ^{ip} pínni (B2)	a-a	i?pi 'go'	
119	go out: he went out	salir: él salió	appáko ope ⁱ me ⁱ íp pi (él vā) (B2)	a-a	i?pi 'go'	"(él va)" appears in the original manuscript following the transcription, probably identifying <i>ippi</i> as 'go'
120	blood	sangre	nonté ^c (B2)	a-a	noó-dú (1.SG-blood) 'my blood'	
121	snake	serpiente	tobénni (B1)	a-Na	onáko 'snake'	probably a different species
122	sun	sol	já ^a e (B1)	a-a	há?í	
123	go up: he goes up	subir: él sube	appáko tenitno ^v se (B2)	a.a- a.a	[...] no-?fú (1.SG-go_up) 'I go up'	
124	go up: he went up (yesterday)	subir: él subió(ayer),	appáko opime ^í nó ^o v ^v se (B2)	a.a- a.a	[...] no-?fú (1.SG-go_up) 'I go up'	

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
125	tobacco	tabaco	nétsebe ^(ye) (B1)	a.a- a.a	nítsí-βídʒú (tobacco-?) 'tobacco paste'	tobacco paste (for licking) is the most common form in which tobacco is used in the region
126	aunt	tia	pa ⁱ _e inná (B2)	a-a	p ^h aiké?naaβú 'maternal aunt'	
127	land	tierra	jippo (B1)	a-a.b	hípo-hí (earth-CL:DISC) 'earth'; hípo 'earth (substance), mud'	
128	jaguar	tigre	k ⁱ ét _e doo (B1)	a-Na	ííní 'jaguar, dog'	jaguar is <i>tigre</i> in local Spanish; this Resígaro form is not attested in contemporary Resígaro, it corresponds to Wavrin's item number 267 'puma'
129	jaguar, cf. eat	tigre:cf.comer				
130	uncle	tio	pítsá (B1)	a-Na	pi-kíígí 'your (maternal) uncle'; pi-náagí 'your (paternal) uncle'	
131	all of them, cf. eat	todos, cf. comer				
132	all of them	todos	páánnä (B2)	b.b.a- b.b.a	pa-?a-ná (all-PL-REST) 'all'	see further attestations of this in items 33, 92, 158
133	drink: he drinks	tomar: él toma	appáko pít _e dö (B2)	a.a- a.a	[...] pi-?dtú (2.SG-drink) 'you drink'	
134	take: he took (grabbed)	tomar: él tomó(cojió),	appáko ópame ^{i i} ékyet ^e pík (B2)	b.a.a- b.a.a	[...] eke? pi-k ^h ú (grab/2.SG-do) '... take!, you take'	
135	you	tú	pé (C); b' pä (B2)	a-a	p ^h ú ~ p ^h á	

#	English	Spanish	Resigaró (Bora material shaded)	sum.	contemp. Resigaró (Bora)	Comment
136	veins (my)	venas (mis)	nokkomá ^k kapétje ^r (B2)	a.a.a- a.a.b	<i>no-komááká-uuuʔó</i> (1.SG-vein-CL:STRING) ‘my veins’	-pétje not identified, is not one of Allin’s (1976:154-163) classifiers; -uuuʔo is a Bora-based classifier
137	come: he comes	venir: él viene	appáko tsá ^a ni (B2)	a-a	[...] tsáʔnú ‘... comes’	
138	come: he came	venir: él vino	appáko op ⁱ _e metsá ⁱ (B2)			
139	cf. yesterday	cf. ayer				
140	see: he sees	ver: él vé	appáko no ^r patä (B2)	a.a- a.a	[...] <i>no-páʔtú</i> (1.SG-see) ‘... I see/look’	
141	see: he saw	ver: él vió	appáko opeme ⁱ no ⁱ patä ^r (B2)	a.a- a.a	[...] <i>no-páʔtú</i> (1.SG-see) ‘... I see/look’	
142	cf. path	cf. camino				
143	summer	verano	kámmé (B2)	a-a	<i>kámi</i>	
144	old	viejo	páe ⁱ (B2)	a-a	<i>p^hai-</i>	
145	wind	viento	kotcebä ^v (B2)	a-a	<i>kotʃíʃú</i>	
146	stomach (my)	vientre(mi),	nobafo ^{re} (B2)	a.a- a.a	<i>no-βáʔo</i> (1.SG-body) ‘my body’	
147	you (plural)	vosotros	abnappöppe (B2)	a- Na.b	<i>ha-ʔá</i> (2.PL-PL) ‘you (plural)’	
148	I	yo	nó (C) ; no ⁱ _r (B2)	a-a	<i>nó</i>	
149	cf. path	cf. camino				

#	English	Spanish	Resígaro (Bora material shaded)	sum.	contemp. Resígaro (Bora)	Comment
150	one	1	apáko (C); appápe (B1)	a-b.b	<i>sa-gú</i> (one-CL:PLANK) ‘one (lit. one finger)’	
151	two	2	itámä (C); itsamáme (B1)	a- b.b.b	<i>mi-gaa-kú</i> (two-CL:PLANK-DL) ‘two (lit. two fingers)’	
152	three	3	itámä-apáko (C)	a- b.b.b	<i>mi-gaa-kú sa-gú</i> (two-CL:PLANK-DL/one-CL:PLANK) ‘three (lit. two fingers, one finger)’	
153	three	3	itsamóapo (B1)	a- b.b.b	<i>mi-gaa-kú sa-gú</i> (two-CL:PLANK-DL/one-CL:PLANK) ‘three (lit. two fingers, one finger)’	
154	four	4	itámä-itámä (C)	a- a.b.a	<i>poʔtsááβá-gaa-hí</i> (center-CL:PLANK-PL) ‘four (lit. middle finger)’	
155	five	5	<i>sáosi</i> c (C)	b.b- b.b	<i>sá-ʔosí</i> (one-CL:HAND) ‘five (lit. one hand)’	
156	six	6	<i>sáosi</i> -apáko c c (C)	b.b.a- b.b.a	<i>si-ʔosí-kʰó sa-gú</i> (other-CL:HAND-ABL/one-CL:PLANK) ‘six (lit. of the other hand one finger)’	
157	seven: five and two	7:cinco y dos				
158	ten	10	<i>paosíke</i> c c (C)	b.b.b- b.b.b	<i>pá-ʔosí-ku-ṇá</i> (all-CL:HAND-DL-REST) ‘ten (lit. just two complete hands)’	

7. Bora elements in a wordlist from the 1970s

This chapter provides transliterations and annotations of all items that contain material borrowed from Bora from Allin’s (1976:382-458) list of about 1,590 Resígaro words. The column “Resígaro” contains Resígaro material taken from that source. This material was transliterated to IPA symbols. The column “English” is taken directly from that source. The items below are ordered by the type of morpheme that is borrowed, then by the Bora source form, grouping together tokens that belong to the same borrowed morpheme. The column “p.” gives the page number in Allin (1976) from which the item is taken.

The abbreviations for morpheme types, by which items are ordered, are given in Table 11. Note that most of the elements identified as one or the other stem type are (monomorphemic) roots, but some are polymorphemic stems, such as those in items 351 and 398-401.

abbreviation	morpheme type
cl	classifier
gend	gender marker
n.der	nominal derivation
num	number marker
st.adj	adjective stem
st.bgr	bound grammatical root
st.n	noun stem
st.n.cul	noun stem, culturally important term
st.n.fau	noun stem, fauna term
st.n.flo	noun stem, flora term
st.n.hum	noun stem, human referent
st.pro	pronoun stem
st.v	verb stem
v.der	verbal derivation

TABLE 11: CONVENTIONS USED IN THE ANNOTATION OF ALLIN’S (1976) DATA

The segments that correspond to the Bora source forms are shaded in the column “Resígaro”. Words that contain more than one borrowed morpheme appear more than once in the Table. For instance, **haádza-bú** (tree-CL:LOG) ‘log of yaripa a tree’ is listed under classifiers (item 3) and again under noun stems, more specifically floral nouns (item 374). Words that appear more than once are identifiable as those in which more material appears shaded in the Resígaro form than what corresponds to the Bora source form, e.g. **haádza-** for **haádzabú**. Glosses of classifiers can to a large extent be deduced from the meanings of the words in which they occur. Full explanations of their meaning are given in Thiesen & Thiesen (1998:354-365).

#	p.	English	Resígaro	Bora source	type	Comment
1	386	rainy season	atsímuit ^h ébú	-ba	cl	
2	386	belly	aʔmit ^h oótsibá	-ba	cl	
3	396	species of tree ‘yaripa’ (cut down)	haádʒabú	-ba	cl	
4	398	hammock (dl)	hamáakábaakú	-ba	cl	classifier attested only in dual form
5	402	trap	higabú	-ba	cl	
6	403	drawer	híitabú	-ba	cl	
7	403	caimito fruit	himaágibú	-ba	cl	
8	416	drink made from fermented yucca, bananas or maize	kadzígibú	-ba	cl	
9	422	drum	koómobú	-ba	cl	
10	447	soursop (Annona muricata) fruit	taʔakábú	-ba	cl	
11	448	a type of animal trap	téneenebú	-ba	cl	this type of trap corresponds to Bora <i>táhkóraba</i> ; the Resígaro form is <i>díjééneba</i> in Seifart’s (2009) data
12	456	ribbon for a woman’s hair, (woman’s) scarf	βedéemábú	-ba	cl	
13	403	sock	hiiʔpabábú	-baba	cl	
14	405	pillow	híβeubábú	-baba	cl	
15	440	bag	piínaubábú	-baba	cl	
16	447	root	tébaké	-bahk ^l e	cl	
17	477	uninhabited part of the jungle, wood	tébahú	-bahuu	cl	
18	386	log	aβáanaβuudú	-βuúruu	cl	
19	436	burning log	okóniigiβuudú	-βuúruu	cl	
20	439	round (like a log), a cut piece of tree trunk	paβuudú	-βuúruu	cl	
21	404	powder	hípodʒihú	-dʒih ^l u	cl	

#	p.	English	Resígaro	Bora source	type	Comment
22	408	sugar	iíts ^h idzihú	-dzih ^h u	cl	
23	418	clay	kaβaʔdzihú	-dzih ^h u	cl	
24	423	sand, beach	koβééʔkóβedzihú	-dzih ^h u	cl	
25	435	ash	okóniigidzihú	-dzih ^h u	cl	
26	405	(long) hair	híβeʔdziiʔó	-dziiʔ ^o	cl	
27	441	tocuma (heart of the hungurahui tree)	ponaámádziiʔo	-dziiʔ ^o	cl	
28	386	scissors	aʔmit ^h oótsígú	-g ^w a	cl	also a calque: in both languages eat-CL:PLANK, cf. Bora <i>máhtʔotág^wa</i>
29	388	paddle	boeʔk ^h óótsígú	-g ^w a	cl	
30	390	hausai palm board for making floor	d ^h uífʔugú	-g ^w a	cl	
31	413	centipede	dʒadaʔígú	-g ^w a	cl	
32	414	waterfall, jet of water, fountain	dʒodooʔfígú	-g ^w a	cl	
33	392	little finger	epóʔpaatsígú	-g ^w a	cl	
34	394	twelve (from our feet two)	feeʔpák ^h ó migaakú	-g ^w a	cl	
35	400	ruler (for measuring)	heeβéʔik ^h ót ^h oónag ú	-g ^w a	cl	
36	403	toe	hiiʔpágú	-g ^w a	cl	
37	404	bar of soap	hip ^h oótsígú	-g ^w a	cl	
38	406	finger/toenail	hiʔtáβígaakú	-g ^w a	cl	classifier appears only in dual form
39	411	comb	its ^h iitágú	-g ^w a	cl	
40	413	bench, seat	iʔts ^h oótsígú	-g ^w a	cl	
41	416	a stick (root) of non-poisonous yucca	kadzíígígá	-g ^w a	cl	

#	p.	English	Resígaro	Bora source	type	Comment
42	417	a stick (tuber) of poisonous yucca	kaníkoʔgú	-g ^w a	cl	
43	417	metal grater	kásoogú	-g ^w a	cl	see also comment to 343
44	419	small wooden board used when cassave bread is made	kaʔfoonagú	-g ^w a	cl	stem is similar to Bora <i>kaatso</i> ‘grate’
45	420	finger	-kégú	-g ^w a	cl	
46	425	spoon	k ^h oótsígú	-g ^w a	cl	another instance on p. 423
47	428	two	migaakú	-g ^w a	cl	Resígaro gloss should probably be ‘two (plank-shaped objects)’
48	434	a shelter, home	núúhigú	-g ^w a	cl	
49	434	lance, harpoon, arrow	noótsígú	-g ^w a	cl	
50	437	chest	-óʔkótáapígú	-g ^w a	cl	
51	442	frog	póotsígú	-g ^w a	cl	
52	444	one	sagú	-g ^w a	cl	Resígaro gloss should be ‘one (plank)’
53	447	table	teégú	-g ^w a	cl	Resígaro gloss should be ‘this (plank, e.g. table)’
54	449	wooden mallet (for grinding yucca)	t ^h oʔk ^h oónagú	-g ^w a	cl	
55	454	scale (of fish, etc.)	-βafogú	-g ^w a	cl	
56	456	machete	βaʔagú	-g ^w a	cl	one more instance on p. 456
57	457	rapids	βíʃiʔógú	-g ^w a	cl	
58	386	raft	aβáanagaaʔdʒó	-g ^w aáʔjo	cl	<i>aβáana</i> ‘wood’
59	447	branch	tégakú	-g ^w ahka	cl	
60	410	eyebrow	íñigahú	-g ^w ahuu	cl	
61	447	peak, hill, height	tégahú	-g ^w ahuu	cl	
62	386	kitchen	aʔmit ^h oótsihú	-ha	cl	
63	404	skirt	hipóonéhú	-ha	cl	
64	429	bed, mosquito net	moótsihú	-ha	cl	
65	438	bed-cover, blanket	pagiñoótsihú	-ha	cl	

#	p.	English	Resígaro	Bora source	type	Comment
66	438	house	paniítsíhaakú	-ha	cl	classifier appears only in dual form
67	448	school	té?aamíhú	-ha	cl	
68	452	blouse, shirt	tsíiñáhú	-ha	cl	
69	388	plate	bo?otáhí	-hi	cl	
70	392	axe	epítsíhí	-hi	cl	
71	396	turtle	haádahí	-hi	cl	
72	399	sky	há?ihí	-hi	cl	
73	402	earth	hihi	-hi	cl	probably <i>hi-hi</i> (this-CL:PLANK) ‘this (flat, e.g. earth)’
74	404	earth	hípohí	-hi	cl	2 more tokens on p. 404
75	415	irapai palm, roof	kaádóhiikú	-hi	cl	classifier appears only in dual and plural
76	423	coin, money	kopáagihí	-hi	cl	same homonymy with ‘tick’ as in Bora
77	433	beard	nodzíhí	-hi	cl	
78	436	tooth	onéhiikú	-hi	cl	classifier only attested in dual form
79	447	hat	ta?moótsíhí	-hi	cl	
80	449	cockroach	toodóhí	-hi	cl	
81	452	feather	tsenéenáhí	-hi	cl	
82	454	rattle (a decoration made from fruit seeds and worn on the ankles in a “language festival”)	βaátsáhí	-hi	cl	another instance on p. 454
83	448	island, sandbank, mudbank	tét’oi	-htoi	cl	
84	446	command	ʃuuk ^h ákáamíhú	-hu	cl	
85	446	command, piece of advice	ʃuuk ^h oótsihú	-hu	cl	
86	397	song	hada?poótsihú	-hu	cl	

#	p.	English	Resígaro	Bora source	type	Comment
87	402	what is recounted about coca while consuming it	hiibiʔéʔasinohú	-hu	cl	literally ‘word of the patio of the coca plant’
88	421	(good) teaching	keʔtsoótsihjú	-hu	cl	calque from Bora <i>mamáʔe-hu</i> (teach-CL:TUBE, WORD, ETC.) ‘word of teaching’
89	431	prayer	nanikoogihú	-hu	cl	
90	433	language	nóhú	-hu	cl	
91	434	word	noóts ^h ihú	-hu	cl	
92	435	rifle	okóniigihú	-hu	cl	
93	450	lesson	tsaagihoótsohú	-hu	cl	
94	452	silly thing	tsikíʔhúhí	-hu	cl	literally ‘empty words’
95	455	fruit of <i>βanaánaʔé</i> tree	βanaánahú	-hu	cl	
96	456	law	βaʔnoótsihú	-hu	cl	
97	456	blowpipe	βáʔpaánahú	-hu	cl	
98	447	palm leaf frond	téhuuʔó	-huuʔo	cl	
99	386	stick	aβánaí	-i	cl	
100	400	stick for measuring	heeβéʔí	-i	cl	
101	415	shin, lower leg	-kaaβaí	-i	cl	
102	420	forearm	-kéí	-i	cl	
103	423	walking stick	kuuuhuí	-i	cl	
104	449	pestle, stick used to grind coca	t ^h oʔk ^h oótsí	-i	cl	grind-CL:STICK
105	431	shoot, new growth (of a pineapple)	nanánaʔiikó	-ihk ^l o	cl	
106	402	pitcher for making coca	hiibiʔéʔid3o	-iʔd3o	cl	
107	411	earthware pot, pitcher, jug	itsaaʔniʔid3ó	-iʔd3o	cl	
108	429	that (earthware pot)	miʔid3ó	-iʔd3o	cl	

#	p.	English	Resígaro	Bora source	type	Comment
109	446	cup	taasaʔidʒó	-iʔdʒo	cl	
110	401	horn	henákoíʔo	-iʔo	cl	
111	449	(iron) nail	t ^h oots ^h íiʔo	-iʔo	cl	
112	382	skeleton	aápiíʔikuú	-iʔk ^l tu	cl	
113	447	support on which meat, etc. is cooked (barbecue-fashion)	teíʔiku	-iʔk ^l tu	cl	
114	410	place where aguaje palms grow	iteeβikaahú	-kaaha	cl	
115	390	hausai palm	d ^h uíʔíʔikó	-ko	cl	
116	409	wild sugar cane	ííts ^h ikó	-ko	cl	
117	409	intestines	iiʔʔákó	-ko	cl	
118	436	trap for fishing	opíitsikó	-ko	cl	fishing-CL:POINTED, corresponding form in Bora means 'fishing rod'
119	437	mousetrap	oβéetsikó	-ko	cl	
120	442	pona, cashapona fruit	poʔpoótakó	-ko	cl	
121	456	tree from which bark-cloth is made	βedéemákó	-ko	cl	
122	456	trunk of the tree from which bark-cloth is made	βedéemákó	-ko	cl	
123	438	all the village, all the people, everybody	pakoomíβá	-koomi	cl	
124	388	broom	botoʔk ^h oókooʔú	-kooʔa	cl	
125	439	broom	panoʔoótsikooʔú	-kooʔa	cl	
126	403	leg	hiiʔpákuuba	-kuuba	cl	
127	410	leg	-íʔp ^h íkuuba	-kuuba	cl	
128	435	launch, boat	okóniigimí	-mi	cl	

#	p.	English	Resígaro	Bora source	type	Comment
129	452	aeroplane	tseñiñemí	-mi	cl	
130	384	tapir skin	añoogí eémámíʔo	-miiʔo	cl	
131	410	eyelid	íñimiiʔó	-miiʔo	cl	
132	422	woman's dress	koméʔmiiʔóhí	-miiʔo	cl	
133	448	sea	témooú	-mo	cl	in Bora free form is <i>moóa</i> , bound form is <i>-mo</i>
134	405	skull	híʔeʔpaahí	-paahi	cl	
135	412	anus	-iʔʔapaahí	-paahi	cl	
136	401	earring	henákopási	-pahtsi	cl	
137	405	hairpin	híʔeʔpási	-pahtsi	cl	
138	410	spectacles	íñipáatsí	-pahtsi	cl	
139	420	ring (for finger)	-képási	-pahtsi	cl	
140	439	curved, round, circle (of wheels, rings, etc.)	papási	-pahtsi	cl	
141	408	honey	íímuʔopákó	-pak ^l o	cl	
142	421	brandy	keʔʔigipákó	-pak ^l o	cl	
143	420	which day?	képekó	-pehko	cl	
144	433	the night before last	nokótsapékó	-pehko	cl	
145	439	every day, always	pápekóʔá	-pehko	cl	
146	444	the day after tomorrow	sípekó	-pehko	cl	
147	448	splinter	tesaadáʔó	-tsaara	cl	
148	444	seventeen	sítuʔák ^h ó ...	-tuʔa	cl	many other instances in other numerals on p. 444
149	400	lamp	héeméú	-u	cl	
150	403	heel	hiiʔpáú	-u	cl	
151	403	seed	hímiú	-u	cl	
152	405	head	-híʔeú	-u	cl	another instance on p. 405
153	407	knee	hoʔdanaú	-u	cl	

#	p.	English	Resígaro	Bora source	type	Comment
154	409	belly	iiʔjáú	-u	cl	
155	410	eye, funnybone	íniú	-u	cl	
156	417	sweet potato	kaniideú	-u	cl	
157	418	jaw	kaʔkáú	-u	cl	
158	419	electric light bulb	keétseú	-u	cl	
159	420	wrist, fist	-kéú	-u	cl	
160	423	small stone	koβééʔkóβeú	-u	cl	
161	433	fruit	niíkaú	-u	cl	
162	435	yam	ofiinaú	-u	cl	
163	436	fruit of <i>ok^hóodoʔé</i> tree	ok ^h óodoú	-u	cl	
164	435	bullet, cartrige	okóniigiú	-u	cl	
165	438	spider	paagáú	-u	cl	
166	439	round thing	paú	-u	cl	
167	440	elbow	pidáadéú	-u	cl	
168	440	pocket, bag	piínaú	-u	cl	
169	440	the fruit of the Guilelma tree	pipíipiú	-u	cl	
170	389	rattle	tʃéʔkeú	-u	cl	
171	449	panguana bird	toopáú	-u	cl	
172	454	shoulder	-βáakóbaú	-u	cl	
173	454	heart	-βáfoú	-u	cl	
174	457	rock, large stone	βíʃiʔóú	-u	cl	
175	392	liana cord	epíipiúúʔó	-uuʔo	cl	
176	404	cord, string	hípoŋáúúʔó	-uuʔo	cl	

#	p.	English	Resígaro	Bora source	type	Comment
177	422	chambira (Astrocarym) palm fiber (for making strings)	komáákáuuu?ó	-uuu?o	cl	
178	448	that rope	téuuu?ó	-uuu?o	cl	
179	385	leaf	apáná?aamí	-?aami	cl	
180	414	big (of leaves, books, etc.)	dʒidʒá?aamí	-?aami	cl	
181	448	notebook, (printed) book, paper	té?aamí	-?aami	cl	
182	402	pillar in house construction	hiímiaakú	-?ahku	cl	
183	384	tapir place in jungle	aŋoógí?ásí	-?ahtsi	cl	
184	402	what is recounted about coca while consuming it	hiibi?é?asinohú	-?ahtsi	cl	literally 'word of the patio of the coca plant'
185	405	crown (of the head)	hiíbe?ásí	-?ahtsi	cl	
186	384	cashew tree	áŋaahí?é	-?e	cl	
187	386	tree	aβáana?é	-?e	cl	
188	392	guamá tree	enóogi?é	-?e	cl	
189	393	stinging nettle plant	eβetsíita?é	-?e	cl	
190	393	rubber tree	eβitsóogi?é	-?e	cl	
191	397	species of tree 'yaripa'	haádʒa?é	-?e	cl	
192	402	what is recounted about coca while consuming it	hiibi?é?asinohú	-?e	cl	literally 'word of the patio of the coca plant'
193	402	pitcher for making coca	hiibi?é?idʒo	-?e	cl	
194	402	hard wood tree used for pillars in house construction	hiímiaaku?é	-?e	cl	
195	404	topa tree	hiŋpuhwi?é	-?e	cl	
196	407	cumala tree	hoou?é	-?e	cl	

#	p.	English	Resígaro	Bora source	type	Comment
197	411	aguaje palms tree	iteefiʔé	-ʔe	cl	
198	415	irapai palm tree	kaádóʔé	-ʔe	cl	
199	416	current bush [tree]	kamídóʔé	-ʔe	cl	
200	416	apacharama tree	kaʔaʔé	-ʔe	cl	
201	422	chambira (Astrocarym) palm tree	komaágiʔé	-ʔe	cl	
202	422	species of rubber tree	konóogiʔé	-ʔe	cl	
203	430	a plant from which a red dye is made	naánaʔé	-ʔe	cl	
204	432	pumpkin vine	nanapítáʔé	-ʔe	cl	
205	433	umari tree	nomágiʔé	-ʔe	cl	
206	436	a tree which gives fruit that only animals eat	ok ^h óodoʔé	-ʔe	cl	
207	436	a species of edible tuber (mafala)	óónaʔé	-ʔe	cl	
208	441	shimbillo tree	pídzaʔé	-ʔe	cl	
209	440	Guilelma (palm tree)	pipípiʔé	-ʔe	cl	
210	441	hungurahui tree	ponaamáʔé	-ʔe	cl	
211	442	pona, cashapona tree	poʔpoótaʔé	-ʔe	cl	
212	446	a species of tree (Ilarumo) the leaves of which are mixed with coca	taaβiʔé	-ʔe	cl	
213	447	a species of tree producing rubber (bigger than leche caspi)	tánaakáʔé	-ʔe	cl	
214	447	soursop (Annona muricata) tree	taʔakáʔé	-ʔe	cl	
215	448	a species (shapaja) of palm tree	tók ^h oʔé	-ʔe	cl	

#	p.	English	Resígaro	Bora source	type	Comment
216	455	tree species that produces a fruit that is not eaten	βanaánaʔé	-ʔe	cl	
217	407	well (waterhole)	hooniʔéhuú	-ʔehuu	cl	
218	448	(pot-)hole	téʔehú	-ʔehuu	cl	
219	445	bunch of bananas	ʃakooʔgíʔí	-ʔi	cl	
220	392	chain	epíitsíʔí	-ʔi	cl	
221	422	chambira (Astrocarym) palm fruit	komaágiʔí	-ʔi	cl	Resígaro gloss should probably be ‘bunch of chambira fruits’
222	441	bunch of Guilelma (palm)	pipíipíʔí	-ʔi	cl	
223	447	big river	teéʔí	-ʔi	cl	in Bora, small rivers (vs. <i>-mo</i> ‘big river’), another instance with diminutive on p. 447
224	445	banana fruit	ʃakooʔgíʔó	-ʔo	cl	
225	406	beehive	hokooméʔó	-ʔo	cl	
226	408	beehive, honeycomb	íimuuʔó	-ʔo	cl	another instance on p. 408
227	409	invitation to a fiesta (lit. veg. salt piece)	ííβíʔo	-ʔo	cl	
228	411	aguaje palms fruit	iteeβiʔó	-ʔo	cl	another instance in the possessed form on p. 412
229	416	salt (for eating; table salt)	kanaamáʔo	-ʔo	cl	
230	426	iguana	maajnáʔo	-ʔo	cl	
231	428	chicha drink from Guilelma (pijuayo) palm fruit	méémeʔo	-ʔo	cl	Bora <i>méémeʔo</i> means dough (not drink) from Guilelma (pijuayo) palm fruit
232	434	pumpkin gourd made into the shape of a bowl or cup	ṅaaʔdéʔó	-ʔo	cl	
233	431	pineapple	nanáanáʔó	-ʔo	cl	
234	432	pumpkin	nanapíitáʔó	-ʔo	cl	
235	432	louse	netets ^h íʔó	-ʔo	cl	

#	p.	English	Resígaro	Bora source	type	Comment
236	433	tobacco	niítsiʔó	-ʔo	cl	
237	450	shrimp, prawn	taaʔkáʔó	-ʔo	cl	
238	389	rattle	tʃéʔkeʔó	-ʔo	cl	
239	448	splinter	tesaadáʔó	-ʔo	cl	
240	451	pencil	tsagíʔo	-ʔo	cl	
241	453	thread	ts ^h omaáts ^h iʔó	-ʔo	cl	
242	452	cricket (insect)	tsiiʔtsiʔó	-ʔo	cl	
243	454	rib	-βáfóʔo	-ʔo	cl	
244	385	left hand	apáʔmíʔosí	-ʔohtsi	cl	this form probably contains a reflex of Proto-Arawakan <i>*ba</i> 'one' while the numeral 'one' does not
245	415	right (not left)	kaaʃoʔosí	-ʔohtsi	cl	
246	439	ten	páʔosíkuṇá	-ʔohtsi	cl	all-CL:HAND-DL-REST
247	444	five	sáʔosí	-ʔohtsi	cl	one-CL:HAND
248	419	lantern, flashlight (torch)	keétséʔooβú	-ʔooβu	cl	
249	404	prison	hipoṇoótsiʔoohú	-ʔooha	cl	
250	422	shop	koneétsiʔoohú	-ʔooha	cl	
251	451	prison	tsp ^h oogiʔoohú	-ʔooha	cl	
252	454	shop	βadóβáʔoohú	-ʔooha	cl	
253	456	tin pot or pan	βats ^h oótsiʔoohú	-ʔooha	cl	
254	404	nose	-hitákó	-ko (?)	cl (?)	no form without classifier attested, -kó could be part of stem
255	389	bark/peel	daʔmí	-mi (?)	cl (?)	no form without a classifier attested in Resígaro, -mí could be part of stem
256	399	match	héepémi	-mi (?)	cl (?)	Bora -mi / Resígaro -mi is a classifier for means of transport
257	409	sugarcane	iíts ^h imú	-mu (?)	cl (?)	no form without a classifier attested in Resígaro Bora <i>iimúba</i> 'sugarcane' includes -mu
258	412	nipple	-iʔníimú	-mu (?)	cl (?)	in Bora, -mu is a derivational suffix with classifier-like behaviour for 1. signal drum, 2. umarí fruit, 3. milk, breast

#	p.	English	Resígaro	Bora source	type	Comment
259	455	sister-in-law (sister of sister-in-law or bother-in-law)	-βanaaʔdʒé	-dʒe	gend	another instance on p. 455
260	397	singer	hadaʔpoótsidʒé	-dʒe	gend	
261	400	student (f)	heeβéʔikʰótsopídʒé	-pidʒe	gend	
262	404	washerwoman	hipʰoótsipídʒé	-pidʒe	gend	
263	415	body, cadaver (of a woman)	kainéedʒotsopídʒé	-pidʒe	gend	
264	416	a drunk (woman)	kamoβíipídʒé	-pidʒe	gend	
265	421	female teacher	keʔtsoótsipídʒé	-pidʒe	gend	
266	424	First Mother (Creator)	kʰeʔdʒotʰóopídʒé	-pidʒe	gend	
267	430	cousin (f of f)	náadopídʒé	-pidʒe	gend	
268	443	old woman	pʰaipídʒé	-pidʒe	gend	
269	444	one (woman)	sapídʒé	-pidʒe	gend	
270	449	a lame woman	tóódʒoβíipídʒé	-pidʒe	gend	
271	451	friend, 'comadre' (between women)	tseemánápidʒé	-pidʒe	gend	
272		white person	ginomomináagi	-a-	n.der	*mina 'owner' is a common Arawakan (Ramirez 2001:669) form, i.e. not a loan from Bora <i>mumá-</i> 'people', which is used in a similar way, also with <i>-a-</i> 'PERT', e.g. <i>apú-múná-a-hpi</i> (burn-people-PERT-M.SG) 'white person', note also the similar tone pattern.
273		thief	haámámináagi	-a-	n.der	see comment to 272
274		wasp	haánimíináagi	-a-	n.der	see comment to 272
275		all the family	-hamínámináagi	-a-	n.der	see comment to 272
276		lazy person	iṅómináagi	-a-	n.der	see comment to 272
277		accuser	tsopókómináagi	-a-	n.der	see comment to 272
278	438	all the village, all the people, everybody	pakoomíβá	-βa	num	

#	p.	English	Resígaro	Bora source	type	Comment
279	439	every day, always	pápekóβá	-βa	num	
280	452	silly thing	tsikíʔhúhí	-hi	num	literally ‘empty words’
281	422	woman’s dress	koméʔmiiʔóhí	-hi	num	
282	394	twelve (from our feet two)	feeʔpák ^h ó migaakú	-ku	num	
283	398	hammock (dl)	hamáakábaakú	-ku	num	
284	406	finger/toenail	hiʔtáβígaakú	-ku	num	
285	415	irapai palm, roof	kaádóhiikú	-ku	num	
286	428	two	migaakú	-ku	num	Resígaro gloss should probably be ‘two (plank-shaped objects)’
287	438	house	paniítsíhaakú	-ku	num	
288	439	ten	páʔosíkuṇá	-ku	num	all-CL:HAND-DL-REST
289	393	we (incl.)	faʔá	-ʔa	num	
290	399	you (pl)	haʔá	-ʔa	num	
291	429	they	miʔá	-ʔa	num	
292	432	they (far)	naʔat ^h é	-ʔa	num	
293	439	together, all, (of people)	páʔaṇú	-ʔa	num	
294	444	other people, others	saʔá	-ʔa	num	another instance on p. 444, <i>siiʔú</i> ‘group (e.g. tribe), alien
295	388	new	beʔé	béʔe	st.adj	
296	402	earth	hihi	hi-	st.bgr	maybe <i>hi-hi</i> (this-CL:DISC) ‘this (flat, e.g. earth)’
297	420	which day?	képekó	ke-	st.bgr	
298	428	two	migaakú	mi-	st.bgr	Resígaro gloss should probably be ‘two (plank-shaped objects)’
299	394	twelve (from our feet two)	feeʔpák ^h ó migaakú	mi-	st.bgr	
300	409	possession	iiʔné	-ne	st.bgr	root forming possessive pronouns, its most frequent allophone in Bora is <i>ne</i> (after <i>i</i> and sometimes <i>a</i>)

#	p.	English	Resígaro	Bora source	type	Comment
301	440	yours	piiʔné	-ne	st.bgr	root forming possessive pronouns, its most frequent allophone in Bora is <i>ne</i> (after <i>i</i> and sometimes <i>a</i>)
302	438	all the village, all the people, everybody	pakoomíβá	pa-	st.bgr	many more items on p. 439
303	439	round thing	paú	pa-	st.bgr	
304	439	curved, round, circle (of wheels, rings, etc.)	papási	pa-	st.bgr	
305	439	every day, always	pápekóβá	pa-	st.bgr	
306	439	together, all, (of people)	páʔaŋú	pa-	st.bgr	
307	439	ten	páʔosíkuŋá	pa-	st.bgr	all-CL:HAND-DL-REST
308	439	round (like a log), a cut piece of tree trunk	paβuuwú	pa-	st.bgr	
309	477	uninhabited part of the jungle, wood	tébahú	te-	st.bgr	
310	447	root	tébaké	te-	st.bgr	many more instances on pp. 447-448
311	447	table	teégú	te-	st.bgr	Resígaro gloss should be ‘this (plank, e.g. table)’
312	447	big river	teéʔí	te-	st.bgr	
313	447	branch	tégakú	te-	st.bgr	
314	447	palm leaf frond	téhuuʔó	te-	st.bgr	
315	447	support on which meat, etc. is cooked (barbecue-fashion)	teíʔiku	te-	st.bgr	
316	448	that rope	téuuʔó	te-	st.bgr	
317	448	sea	témooú	te-	st.bgr	in Bora free form is <i>moóa</i> , bound form is <i>-mo</i>
318	448	splinter	tesaadáʔó	te-	st.bgr	
319	448	notebook, (printed) book, paper	téʔaamí	te-	st.bgr	
320	448	(pot-)hole	téʔehú	te-	st.bgr	
321	448	island, sandbank, mudbank	téʔoí	te-	st.bgr	

#	p.	English	Resígaro	Bora source	type	Comment
322	444	one	sagú	tsa-	st.bgr	Resígaro gloss should be ‘one (plank)’
323	444	one (woman)	sapídʒé	tsa-	st.bgr	
324	444	other people, others	saʔá	tsa-	st.bgr	another instance on p. 444, <i>siíʔú</i> ‘group (e.g. tribe), alien
325	444	five	sáʔosí	tsa-	st.bgr	one-CL:HAND
326	444	alien, foreign to	siígí	tsi-	st.bgr	
327	444	the day after tomorrow	sípekó	tsi-	st.bgr	
328	444	seventeen	sítuʔák ^h ó ...	tsi-	st.bgr	many other instances in other numerals on p. 444
329	422	village, group, tribe	-koomí	koomi	st.n	in Bora, as well as in Resígaro, this can be used as a noun and as a classifier
330	423	walking stick	kuuhuí	kuuhú-	st.n	
331	438	(quite a lot of) water	pakó	-pak ^o	st.n	in Bora <i>-pak^o</i> is bound and used only in classifier slots
332	407	lake	húneú	úneuu	st.n	probably contains the classifier <i>-uu</i> , although no form without a classifier is attested in Bora or Resígaro
333	454	saliva	úni	uni	st.n	
334	426	mask	maáníʔúúmí	ʔúúmí	st.n	<i>maání-ʔúúmí</i> (tar-face) ‘mask decorated with tar’
335	446	cup	taasaʔídʒó	taátsa	st.n (?)	originally from Spanish <i>taza</i> ; uncertain if borrowed through Bora or directly from Spanish
336	388	plate	boʔotáhí	boʔtá	st.n.cul	
337	453	grated manioc	tsoʔβómú	dzoʔβúmu	st.n.cul	<i>dz > ts</i> and <i>o > u</i> irregular; may be from a third language, since it is phonologically unusual in Bora
338	402	place where coca is prepared	-hibiiʔété	íibii	st.n.cul	<i>(h)ibi</i> is common in all languages of the ‘People of the Centre’; uncertain from which it was borrowed into Resígaro
339	402	what is recounted about coca while consuming it	hiibiʔéʔasinohú	íibii	st.n.cul	literally ‘word of the patio of the coca plant’; see comment to 338
340	402	pitcher for making coca	hiibiʔéʔidʒo	íibii	st.n.cul	see comment to 338
341	416	to add salt	kanaamanúʔi-k ^h ú	káánámaá	st.n.cul	salt-VBLZ:DO-PRED; <i>káánámaá</i> refers only to white people’s salt, this form is common in many languages of the region, but its origin is unknown

#	p.	English	Resígaro	Bora source	type	Comment
342	416	salt (for eating; table salt)	kanaamáʔo	káánámaá	st.n.cul	see comment to 341
343	417	metal grater	kásoogú	kátsoó	st.n.cul	Bora <i>kátsoó-g^wa</i> ‘grater’; the Bora verb <i>kaátso</i> ‘grate’ was not borrowed as a verb, only in this complex form
344	422	big drum for signalling	koómó	kuúumu	st.n.cul	<i>u</i> > <i>o</i> irregular
345	422	drum	koómobú	kuúumu	st.n.cul	<i>u</i> > <i>o</i> irregular
346	425	pitch, tar	maání	máání	st.n.cul	another instance on p. 424
347	426	mask	maáníʔúumí	máání	st.n.cul	
348	426	cazabe	maaʔmú	maʔmá-	st.n.cul	In Bora the source form <i>maʔmá-ur</i> (manioc_bread-CL:ROUND) ‘(one) manioc bread’ seems to be archaic or restricted to formal registers, the more common form is <i>maáʔo</i>
349	434	a shelter, home	núúhigú	núúhu-	st.n.cul	<i>u</i> > <i>i</i> irregular; not attested without classifier in Bora or Resígaro; two more forms on p. 434
350	446	a species of tree (Ilarumo) the leaves of which are mixed with coca	taaʔíʔé	taáʔi	st.n.cul	
351	402	hard wood tree used for pillars in house construction	hiímiaakuʔé	ímiáá-ku	st.n.cul (?)	The close phonological correspondence and semantics suggest that this stem may be related to Bora <i>ímiáá-ku</i> (true-DL?), although this is not an attested Bora word.
352	389	rattle	tʃéʔkeú	tʃakíʔtʃáki	st.n.cul (?)	Bora <i>tʃakíʔtʃáki</i> ‘sound of rattle’, both forms onomatopoeic
353	396	partridge	haagú	áág ^w a	st.n.fau	<i>-g^wa</i> is probably not a classifier since it is not segmentable and not attested on other faunal nouns
354	398	dolphin	hamaánú	amána	st.n.fau	direction of borrowing unclear: related forms are attested in Muinane (Boran) (Walton, Walton & Paky de Buenaventura 1997:70) and Baniwa-Kurripako, Kubiyaía, Yukuna, Wainuma, and Mariaté (Arawakan) (Ramirez 2001:374, 644)
355	383	fish	ámoogí	ámoó-be	st.n.fau	in both languages, native third person masculine/non-feminine suffixes
356	387	stingray	bahí	báhi	st.n.fau	

#	p.	English	Resígaro	Bora source	type	Comment
357	389	trumpeter bird	déeneʔé	déeneʔe	st.n.fau	-ʔe is probably not a classifier since it is not segmentable and not attested on other faunal nouns
358	413	centipede	dʒadaʔíguú	dʒáraʔí-	st.n.fau	
359	414	parrot	dʒoódúú	dʒoóra	st.n.fau	
360	400	fly	heéte	eéte	st.n.fau	
361	408	beehive, honeycomb	íímuʔó	íímuʔo	st.n.fau	
362	415	chicken	kádatúú	karaka	st.n.fau	<i>k > t</i> irregular; this form is common in many languages of the region, probably from Tupi, via Lingua Geral
363	425	frog	k ^h onaaʔé	kónááheé	st.n.fau	-ʔe is probably not a classifier since it is not segmentable and not attested on other faunal nouns
364	426	iguana	maapnáʔo	máápa-	st.n.fau	
365	407	capybara	hoʔbúú	oʔba	st.n.fau	
366	438	spider	paagáúú	paag ^w á-	st.n.fau	
367	440	ant	piímé	piímye	st.n.fau	in Bora, singular is formed with the classifier <i>-ba</i> , this is not attested in Resígaro
368	449	a species of monkey (sumilenocito)	t ^h iit ^h íʔó	tíitiʔo	st.n.fau	a species of squirrel in Bora; this item is not in Thiesen & Thiesen, but in Seifart (2009)
369	449	panguana bird	toopáúú	tohpá-	st.n.fau	
370	449	cockroach	toodóhí	tooró-	st.n.fau	
371	445	small lizard	soβidákó	tsóβiráko	st.n.fau	possibly <i>-ko</i> is a classifier, but no forms without classifier are attested
372	450	parakeet	t ^h uigiʔó	túriiʔo	st.n.fau	<i>r > g</i> irregular (usually <i>d</i>)
373	448	toad	todokáakúú	kákaá	st.n.fau (?)	only about half of the segments coincide
374	397	species of tree 'yaripa'	haádʒaʔé	áádʒa	st.n.flo	
375	404	topa tree	híjuuhuiʔé	íjujúúí-k ^l o	st.n.flo	balsa is <i>topa</i> in local Spanish
376	407	cumala tree	hoouʔé	óóu-ʔe	st.n.flo	
377	427	peanut	mats ^h aákúú	mátsahka	st.n.flo	

#	p.	English	Resígaro	Bora source	type	Comment
378	428	chicha drink from Guilelma (pijuayo) palm fruit	méémeʔo	mééme-	st.n.flo	Bora <i>méémeʔo</i> means ‘dough’ (not drink) ‘from Guilelma (pijuayo) palm fruit’
379	447	soursop (Annona muricata) fruit	taʔakábú	teʔké	st.n.flo	<i>e > a</i> irregular, insertion of vowel after <i>ʔ</i> regular
380	448	a species (shapaja) of fruit	tók ^h ó	tóókeé	st.n.flo (?)	<i>k > k^h</i> and <i>e > o</i> irregular
381	430	brother (of brother), husband (of wife)	muúbé	muúbe	st.n.hum	
382	430	wife (of husband)	múwdzé	muúdzé	st.n.hum	
383	446	grandmother (maternal and paternal)	taádzé	taádze	st.n.hum	
384	450	grandfather (maternal or paternal)	ʔaʔdífo	taʔdíu	st.n.hum	
385	450	Huitoto Muinan □ (language group)	t ^h oʔk ^h úmuú	toʔkúmu	st.n.hum	in Bora, this means ‘Hiutoto’ and also ‘rotten’
386	430	we (exclusive)	muuuʔá	muúʔa	st.pro	may include the plural marker <i>-ʔa</i> but this is not segmentable in both Bora and Resígaro
387	388	bathed in blood	béʔdowuukunúʔ	beero- uukunu	st.v	Bora <i>beero</i> ‘shave’; <i>-uukunu</i> stative verb derivation
388	400	stick for measuring	heeβéʔí	eeβé(-ʔi)	st.v	
389	400	threaten, dictate, read, note, calculate	heeβéʔi-k ^h u	eeβé(-ʔi)	st.v	Bora gloss ‘read, count, measure’
390	400	ruler (for measuring)	heeβéʔik ^h ót ^h oónag ú	eeβé(-ʔi)	st.v	
391	400	student (f)	heeβéʔik ^h ótsopídzé	eeβé(-ʔi)	st.v	
392	415	cause a flood	kaaháβeʔi-k ^h u	kááhaβé(-ʔi)	st.v	
393	415	to take notice of, to believe, to have faith	kaákusóʔi-k ^h u	káʔkuhtsó (-ʔi)	st.v	
394	423	signal, indicate	kuhúʔ-k ^h u	kuhu	st.v	Bora <i>kuhu</i> ‘movement of extending the arm to indicate’

#	p.	English	Resígaro	Bora source	type	Comment
395	440	to serve	píkoʔpaβí	piko	st.v	another instance of that stem on p. 440; nothing corresponding to <i>-ʔpavi</i> , or <i>-phaaβú</i> (p. 440) attested in Bora
396	441	to throw (away)	-píʔko	piko	st.v	
397	451	come	tʂaʔnúú	tsaa-	st.v	addition of <i>-ʔnu</i> unexplained; there are no cognates in other Arawakan languages
398	425	break up	k ^h oβakóʔi-k ^h ú	dóβaahkó (-ʔi)	st.v (?)	Bora <i>do-</i> is an instrument prefix, there is no instrument prefix <i>ko-</i> ; <i>khova</i> is another verb meaning ‘break’ in Resígaro, which has no correspondence in Bora
399	416	to add salt	kanaamanúʔi-k ^h ú	-nú(-ʔi)	v.der	salt-VBLZ:DO-PRED; the Bora source form is complex
400	415	to like, to want	kaaʃodʒáʔi-k ^h ú	-ʔi	v.der	<i>-ʔi</i> in Bora is a predicate marker, <i>-dʒá</i> is possibly from Bora <i>-dʒe</i> , as in <i>ími-dʒe-ʔi</i> (good-VBLZ:CONSIDER_AS-PRED) ‘like, want’.
401	421	to cut into pieces	kiokóʔi-k ^h ú	-ʔi	v.der	<i>-ʔi</i> in Bora is a predicate marker

8. Summary and conclusion

This study has addressed the question of lexical borrowing in Resígaro by analyzing extensive data which showed that the percentage of lexical borrowing from Bora into Resígaro is around or below 5%, far from Aikhenvald's (2001:182) claim of about 25%, but closer to Payne's (1985) finding of about 10% (which included bound forms and uncertain lookalikes). The percentage of loanwords is comparable in the three Resígaro wordlists analyzed here from the 1920s, the 1930s, and the 1970s.

This study has also shown that Resígaro borrowed from Bora entire sets of bound grammatical morphemes, including classifiers, gender markers, number markers, and bound grammatical roots. This extent of morphological borrowing is even more surprising given the limited lexical borrowing. The result is a mostly Resígaro lexicon (at least with respect to lexical items from open classes, such as nouns and verbs), and morphology of mixed etymologies: while all verbal morphology is native Arawakan, much of the nominal morphology was borrowed from Bora. However, Resígaro may still firmly be considered an Arawakan language, despite heavy borrowing. This distinguishes Resígaro from mixed languages (Bakker & Mous 1994) for which the genealogical affiliation is often much harder to determine given the extent of mixing either within the lexicon or with nearly the entire morphology being from a different source than the lexicon.

The fact that Resígaro is now a moribund language might suggest that the mixing of etymologically distinct morphological material may be the result of language decay. However, the analyses of historical documents reproduced here (one of them is being published for the first time) show that the pattern of massive morphological borrowing goes back at least a number of generations, when Resígaro was still spoken by an entire speech community. Additionally, the phonological shape of some Bora loans in Resígaro suggests that at least some borrowing took place more than 190 years ago. These findings give credit to the resilience and integrity of a moribund language and demand caution about statements that dismiss unusual characteristics in the speech of last speakers of threatened and dissolving speech communities as unsystematic variability.

There are, however, indications in the historical data for some structural change since the 1920s, namely the loss of cross-referencing suffixes for objects and subjects of stative verbs. The evidence for this possible structural change remains somewhat inconclusive in the historical data, which mostly contain words in isolation.

An interesting question is why Resígaro borrowed morphology so massively, especially nominal morphology, from Bora, and so little lexicon. There are a number of social as well as structural factors that may help to explain this. Firstly, Resígaros probably had high motivation for borrowing from Bora as newcomers eager to be part of the cultural system of the local multilingual cultural area, the People of the Center. In spite of the sparsity of lexical borrowings, those lexemes that are borrowed may reveal something about the contact situation. Interestingly, among the—in total relatively few—Bora loanwords in Resígaro there are many terms for local flora and fauna and terms of local culture, e.g. for food processing and terms related to ceremonies and magic, such as signal drums, tobacco, and coca. This supports that Resígaros were newcomers in the

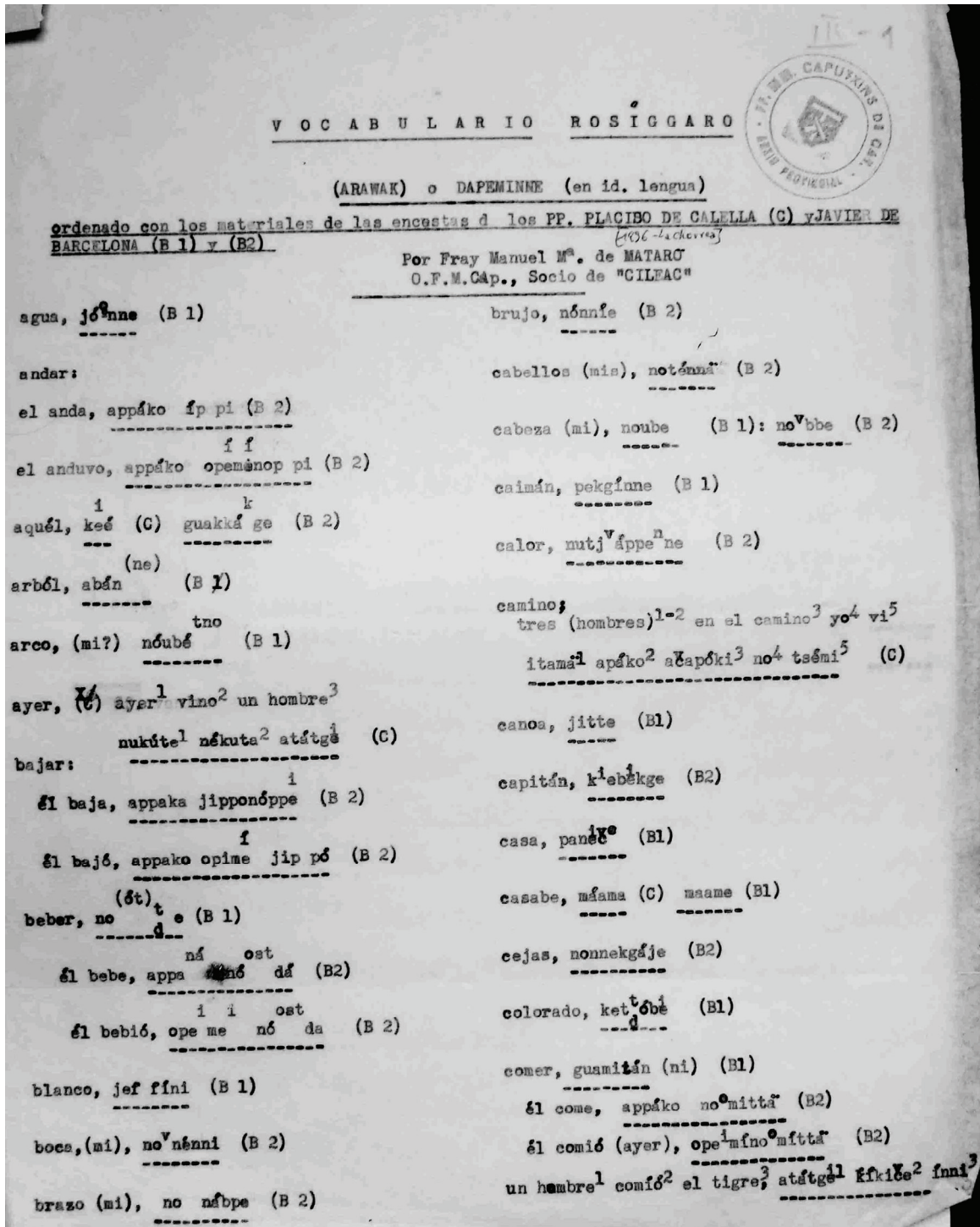
area, which may have been settled by Boras already. Indeed, it is a recurrent Arawakan pattern to culturally assimilate to the local inhabitants wherever Arawakan peoples arrived in the course of the spectacular Arawakan expansion across much of the South American continent. One way of assimilating linguistically may have been to adopt structures and at least some morphemes from neighboring languages, such as extensive nominal classification systems, which most or all languages of the People of the Center employ (Seifart 2007).

A second factor that may have been important for shaping the specific contact-induced change in Resígaro is an inhibition against lexical borrowing that is shared among the People of the Center, to which both Resígaro and Bora belong. There are relatively few loanwords in any of these languages, and even for recently introduced objects of Western culture there is a strong preference for the formation of neologisms over loanwords. This inhibition is, however, not as strict as that imposed by the system of linguistic exogamy in the Vaupés region, which neighbors the People of the Center's territory to the north. Accordingly, in the Vaupés languages, there are practically no loanwords and, interestingly, there are no borrowed grammatical morphemes either, despite wide-reaching structural convergence (see, e.g., Epps 2006). One social reason for little lexical and massive morphological borrowing may thus be a strong, but not all-encompassing inhibition against borrowing foreign linguistic material (as against linguistic structure, for which social inhibitions are unlikely because structure is not easily detectable as foreign). This specific kind of social inhibition would largely restrict lexical borrowing of nouns and verbs, but would allow grammatical morphemes to 'slip through'.

There is also a structural factor that may help to explain why one specific set of grammatical morphemes was borrowed in Resígaro but not other sets of grammatical morphemes. The borrowed morphemes are tightly integrated structurally and are interrelated among each other, which may have made it favorable to borrow the entire set, once a few members were borrowed (Seifart 2009). The process of morphological borrowing may have started out with classifiers, which may serve an emblematic function in the local culture. These elements are closely associated with the second main group of borrowed morphemes, number markers. In the languages involved, Bora and Resígaro, classifiers specify countable and enumerable units; in some contexts number marking presupposes classifier affixation (see Seifart 2009). Classifiers are also closely associated with bound grammatical roots, forming numerals, demonstrative, and other pronominal expressions. These roots combine with classifiers to form expressions often used for reference tracking (see also Aikhenvald 2001:188). The structural dependency of the borrowed grammatical morphemes may thus have made it favorable for this entire set of forms to be borrowed, and not other, structurally unrelated grammatical morphemes, such as, e.g., verbal morphology.

To conclude this study, it is hoped that the rich linguistic material presented here, consisting of annotations of data published elsewhere as well as the first publication of hitherto unpublished and inaccessible historical Resígaro data, may be useful for further comparative studies. There are a number of lines of research along which these data could be further analyzed, including comparative Arawakan studies on the one hand, and studies on language contact and language mixing on the other hand.

Appendix: Photographs of the newly discovered wordlists from the 1930s



tu ¹ come ² casabe ³ , pa ¹ mita ² mífama ³ (C)	ése ¹ , kéé (C)
todos ¹ coman ² plátano ³ , páfana ¹ mite ² siako³ (C)	espaldas(mi), nobákko (B2)
cuello (mi), ñónnotje (B2)	este, kéé (C), gés (B2)
danta, atnóge (B1)	estrelia , ét estrelia, no (B1)
decir:	flecha, téboko (B1)
él dice, appáko pikéte (B2)	frio, jípegetse (B2)
él dijo (ayer), appáko ópemépikéte . (B2)	fuego, okonég (B1)
dedo (mi), nokkétge (B2)	grande, atnépó (B1)
despertarse:	guscamayo (papagayo), atnátó (B1)
él se despierta, appáko odrappón ne (B2)	hacha, epi¹ (B1)
él se despertó, appáko opimenappón ne . (B2)	hermano, nonnóge (B2)
diente, (mi), nonnéjje (B1)	hija, tíyáíá (B2)
dientes (mis), nonnéjje ¹ (B2)	hijo, piia^{án}ni (B2)
dormir:	hombre, atátgé ¹ (C), (en general y también refi- (B2) riéndose al varón) atáge, XXXXXX véase XXXX indio. (B2)
él duerme, appáko óma^{ák}ge (B2)	indio, itnabiyániki (C), itnát ^{da} (B2)
él durmió, opime ¹ appáko im^{ma} (B2)	invierno, anapé ^B rá' ve (B2)
él, éki (C) appáko (B2)	ir:
ella, épi^v (C)	él va, appáko ó ip p ¹ (B2)
ellos, ses^kganne (B2)	él fué (ayer), opeméⁱ apákoip pi (B2)
entrar:	
él entra, appáko nóte neté notá^{no} (B2)	
él entró (ayer), appáko opeméⁱ notá (B2)	

mañana ¹ se irán ² dos (hombres) ³	nariz (mi), nottákkó (B2)
apan ¹ nfi ² itámi ³	negro, tápo ¹ (B1)
----- (C)	
mañana ¹ se irán ² dos ³ mujeres ⁴ ,	nosotros:
apan ¹ nfi ² mipit ^v skéi (3?) itnátron ⁴ (C)	(yo y tú: nó-pá.) todos: páni (C)

lengua (mi), noujépe (B1), no ^u jébpé (B2)	né ⁱ k ^g fi (B2)

luna, kéé ^g ge (B1), ké st ge (B2)	oir:
-----	éi oye, appáko nó ^o mó, si^oyo^o(ayer)
una luna, appákomá ké st ge (B2)	éi oyó (ayer), appáko ope ⁱ ne ⁱ nó ^o mó (B2)

dos lunas, itama ké st ge (B2)	ojo (mi), nonne ^c j (B1), nó ^u ne ⁱ j (B2)

después de dos lunas se va,	oler:
itamáne ⁱ ppi ké st ge (B2)	éi huele, appákkó sisíno ^k ke (B2)

maíz, be ^e kká (B1)	éi olió (ayer), appáko opéne ⁱ nó ^k ke (B2)

malo:	olla, beníti (B2)
malo ¹ el plátano ² ,	-----
matébane ¹ siakó ^{ge} (C)	oreja, nó ^o be (B1), nó ^o béne ⁱ (B2)

mano (mi), noukeáosi (B1), nokkeáosi ⁱ (B2)	mamá, a ^á pe (B2)

mañana, apan (C)	morir:
-----	éi morió, appákkó o akká ^v je (B2)
mañanita, napiéke ?(C)	-----
-----	niño, ^v záinne (B2)
marido, rúte ^v tiki (C)	-----
-----	nube, típo ^v be (B2)
mono, kapádo (B1)	-----
-----	pájaro, kobéte (B1)
mujer, itnátro (C), itnátdó (B1), nó ^o n no (B2),	-----
-----	papá, a ^á mi (B2)
india, itnátdá (B2)	-----
-----	papagayo, cf. guacamayo (B1)
mañanita ¹ llegó ² una mujer ³ , napiéke ¹	-----
-----	pecho (mi), nó ^o kottápe (B2)
rókuta ² itnátro ³ (C)	-----

pequeño, <u>st^vē</u> (B1)	tabaco, <u>nētsebe^v</u> (B1)
pescado, <u>ámno</u> (B1)	tia, <u>paⁱinná</u> (B2)
pestañas, <u>notsótte</u> (B2)	tierra, ipmxxxx(B2) , <u>jippo</u> (B1)
perro, <u>itni</u> (B1)	tigre, <u>kⁱst^ooo</u> (B1), cf. comer (C)
pié(mi), <u>nó kpe</u> (B1), <u>nókpate^{eg}</u> (B2)	tio, <u>pítsá</u> (B1)
piedra, <u>p^visio</u> (B1)	todos, cf. comer (C), <u>piánná</u> (B2)
piel, (mi), <u>nokapétte</u> (B2)	tomar: <u>él toma, appáko pít^o</u> (B2)
pierna (mi), <u>nokkábay</u> (B2)	<u>él tomó (cojió), appáko opⁱeméekyetpik^e</u> (B2)
plátano, <u>Viako^{eg}</u> (C)	tu, <u>pé</u> (C), <u>b^o pá</u> (B2)
<u>maló¹ el plátano², matábana¹ i Viako^{eg}</u> (C)	venas (mis), <u>nokkoma^kkapét^vje</u> (B2)
quién, <u>kegén</u> (C), <u>kⁱéjé</u> (B2)	venir; <u>él viene, appáko tsá^ani</u> (B2)
rodillas (mis), <u>notónnaa^e</u> (B2)	<u>él vino, appáko opⁱemétsá</u> (B2)
sabroso, cf. plátano	cf. ayer (C)
salir: <u>él sale, appáko oⁱp pínni</u> (B2)	ver: <u>él vé, appáko no^rpatá</u> (B2)
<u>él salió, appáko opeⁱmeⁱ ip pi (él va)</u> (B2)	<u>él vió, appáko opⁱemé no^rpatá</u> (B2)
sangre, <u>nont^g</u> (B2)	cf. camino (C)
serpiente, <u>tobénni</u> (B1)	verano, <u>kámme</u> (B2)
sol, <u>já^ae</u> (B1)	viejo, <u>páⁱe</u> (B2)
subir: <u>él sube, appáko tenitno^ve</u>	viento, <u>kot^vebá</u> (B2)
<u>él subió (ayer), appáko opimeⁱ nó^o ^ve</u> (B2)	

vientre (mi), nobafó^{re} (B2)

vosotros, abnappópe (B2)

yo, nó (C), nó³ (B2)

 cf. camino (C)

1. apáko (C), appápe (B1)

2. itámá (C), itsamáne (B1)

3. itámá-itámá³ itámá-apáko (C), itsamápo (B1)

4. itámá-itámá (C)

5. Sápsi (C)

6. sápsi-apáko (C)

7. cinco y dos (C)

10. pasíka (C)

References

- Aikhenvald, Alexandra Y. 1999. The Arawak language family. In R. M. W. Dixon & Alexandra Y. Aikhenvald (eds.), *The Amazonian languages*, 65-106. Cambridge: Cambridge University Press.
- Aikhenvald, Alexandra Y. 2001. Areal Diffusion, Genetic Inheritance, and Problems of Subgrouping: A North Arawak Case Study. In Alexandra Y. Aikhenvald & R. M. W. Dixon (eds.), *Areal Diffusion and Genetic Inheritance. Problems in Comparative Linguistics*, 167-194. Oxford: Oxford University Press.
- Allin, Trevor R. 1976. *A Grammar of Resígaro*. Horseleys Green: Summer Institute of Linguistics. http://www.sil.org/americas/peru/show_work.asp?id=15285. (26 May, 2011)
- Aschmann, Richard P. 1993. *Proto Witotoan*. (Publications in Linguistics 114). Arlington, TX: The Summer Institute of Linguistics and the University of Texas at Arlington.
- Bakker, Peter & Maarten Mous (eds.). 1994. *Mixed languages: 15 case studies in language intertwining*. (Studies in Language and Language Use 13). Amsterdam: IFOTT.
- Bartolomé de Igualeada & Marcelino de Castellví. 1940. Clasificación y estadística de las lenguas habladas en el Putumayo, Caquetá y Amazonas. *Amazonia Colombiana Americanista. Organo semestral de materiales y estudios para la Americanística del CILEAC de Sibundoy* 1(2-3). 91-101.
- Bartolomé de Igualeada. 1940. Informe sobre el Centro de Investigaciones Lingüísticas y Etnográficas de la Amazonia Colombiana [1933-1940]. *Amazonia Colombiana Americanista. Organo semestral de materiales y estudios para la Americanística del CILEAC de Sibundoy* 1(2-3). 61-90.
- Campbell, Lyle & Martha C. Muntzel. 1989. The structural consequences of language death. In Nancy C. Dorian (ed.), *Investigating obsolescence. Studies in language contraction and death*, 181-196. (Studies in the Social and Cultural Foundations of Language 7). Cambridge: Cambridge University Press.
- Cohen, Marcel. 1928. *Instructions pour le voyageurs: Instructions d'enquête linguistiques*. Paris: Institut d'Ethnologie de l'Université de Paris.
- Danielsen, Swintha. 2007. *Baure: an Arawak language of Bolivia*. (Indigenous Languages of Latin America 6). Leiden: CNWS Publications.
- Echeverri, Juan A. 1992. Sondeo de fuentes bibliográficas sobre leguajes del interfluvio Caquetá-Putumayo. *Amazonia colombo-peruana. Amerindia* 17. 149-172.
- Echeverri, Juan A. 1997. The people of the center of the world. A study in culture, history and orality in the Colombian Amazon. New York: New School for Social Research, Faculty of Political and Social Science ph.d. dissertation.
- Epps, Patience. 2006. The Vaupés melting pot: Tukanoan influence on Hup. In R. M. W. Dixon & Alexandra Y. Aikhenvald (eds.), *Grammars in Contact. A Cross-Linguistic Typology*, 267-289. (Explorations in Linguistic Typology 4). Oxford: Oxford University Press.

- Gasché, Jürg. 2009. La sociedad de la “Gente del centro.” In Frank Seifart, Doris Fagua, Jürg Gasché & 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. (26 May, 2011)
- Gaspar de Pinell. 1924. *Un viaje por el Putumayo y al Amazonas. Ensayo de navegación*. Bogotá: Imprenta nacional.
- Hardenburg, Walter. 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.
- Heath, Jeffrey. 1978. *Linguistic Diffusion in Arnhem Land*. Canberra: Australian Institute of Aboriginal Studies.
- Javier de Barcelona. 1938. Encuestas esquemáticas y sumarias de las lenguas siguientes: Rosígaros (lengua inédita), Bora-Emejeite, Bora-Muinane, Nonuya y Okaina (lenguas inéditas), Uitoto-Mekka, Uitoto Menekka, idem-Muruy, idem-bué. Textos de bailes y frases y vocablos distintivos de varios dialectos, varios en notación fonética y revisados por el autor que habla uitoto. Unpublished manuscripts from the Archivo del Centro de Investigaciones Lingüísticas y Etnográficas de la Amazonía Colombiana, Sibundoy.
- Landaburu, Jon & Tulio Rojas Curieux (eds.). 1996. *Lenguas de la Amazonía Colombiana*. (Documentos Sobre Lenguas Aborígenes De Colombia Del Archivo De Paul Rivet 1). Bogotá: Universidad de los Andes, CCELA.
- Landaburu, Jon & Tulio Rojas Curieux (eds.). 1998. *Lenguas de la Orinoquía y del Norte de Colombia*. (Documentos Sobre Lenguas Aborígenes De Colombia Del Archivo De Paul Rivet 2). Bogotá: Universidad de los Andes, CCELA.
- Landaburu, Jon & Tulio Rojas Curieux (eds.). 1999a. *Lenguas del sur de Colombia*. Vol. 3. (Documentos Sobre Lenguas Aborígenes De Colombia Del Archivo De Paul Rivet). Bogotá: Universidad de los Andes.
- Landaburu, Jon & Tulio Rojas Curieux (eds.). 1999b. *Lenguas del Occidente de Colombia*. (Documentos Sobre Lenguas Aborígenes De Colombia Del Archivo De Paul Rivet 4). Bogotá: Universidad de los Andes.
- Lexicon Cappucinum*. 1951. Rome: Collegio Internaz. S. Lorenzo da Brindisi.
- Loukotka, Čestmír. 1968. *Classification of South American Indian languages*. (Ed.) Johannes Wilbert. Latin American Center, University of California, Los Angeles.
- Manuel María de Mataró (ed.). no date. Vocabularios Rosígaro (Arawak) o Dapeminne (en id. lengua) ordenado con los materiales de las encuestas de los PP. Placido de Calella y Javier de Barcelona. Unpublished document from the files of the CILEAC, Sibundoy, Colombia, held in the Arxiu Provincial dels Caputxins de Catalunya, Barcelona.

- Marcelino de Castellví & Lucas Espinosa Pérez. 1958. *Propedeutica etnioglotologica y diccionario clasificador de las lenguas indoamericanas*. Madrid: Consejo Superior de Investigaciones Científicas.
- Marcelino de Castellví. 1934. Las investigaciones lingüísticas y etnográficas en la Misión del Caquetá. Introducción y Bibliografía. *Revista de Misiones (Bogotá)* X-XI(111-117). 363-371.
- Marcelino de Castellví. 1938. La lengua kofán. *Journal de la Société des Américanistes* 30(2). 219-233.
- Marcelino de Castellví. 1953. La macrofamilia lingüística Witoto y sus relaciones con la familia Sabela y otras Indoamericanas. In Sol Tax (ed.), *Indian Tribes of Aboriginal America. Selected papers of the 29th International Congress of Americanists, vol. 3*, 295-301. Chicago: University of Chicago Press.
- Martius, Carl Friedrich Philipp von. 1867. *Beiträge zur Ethnographie und Sprachenkunde Amerika's, zumal Brasiliens. Vol. II: Zur Sprachenkunde. Wörtersammlung Brasilianischer Sprachen. Glossaria linguarum Brasiliensium. Glossarios de diversas lingoas e dialectos, que fallao os Indios no imperio de Brazil*. Leipzig: Friedrich Fleischer. [\[EtnoLink\]](#)
- Meléndez L., Miguel Angel. 1998. *La lengua achagua. Estudio gramatical*. (Lenguas Aborígenes De Colombia. Descripciones 11).
- Payne, David. 1985. The genetic classification of Resígaro. *International Journal of American Linguistics* 51(2). 222-231.
- Payne, David. 1991. A Classification of Maipuran (Arawakan) Languages Based on Shared Lexical Retention. In Desmond C. Derbyshire & Geoffrey K. Pullum (eds.), *Handbook of Amazonian Languages. Vol. 3*, 355-499. Berlin: Mouton de Gruyter.
- Plácido de Calella. 1936. Encuestas esquematicas y sumarias del Kofán, Rosígaro, Muinane-Uitoto del Putumayo (lenguas inéditas) y encuestas sumaria la parte del Siona de Comandante Playa, 1934. Unpublished manuscripts from the Archivo del Centro de Investigaciones Lingüísticas y Etnográficas de la Amazonía Colombiana, Sibundoy.
- Ramirez, Henri. 2001. *Línguas Arawak da Amazônia Setentrional: Comparação e Descrição*. Manaus: Editora de Universidade do Amazonas.
- Reinoso Galindo, Andrés Eduardo. 2002. *Elementos para una gramática de la lengua piapoco*. Bogotá: Ministerio de Cultura.
- Ribeiro, Darcy & Mary Ruth Wise. 1978. *Los grupos étnicos de la amazonía peruana*. (Comunidades Y Culturas Peruanas 13). Lima: Ministerio de Educación and Instituto Lingüístico de Verano.
- Rivet, Paul & Robert de Wavrin. 1951. Un nouveau dialecte arawak: Le Resígaro. *Journal de la Société des Américanistes* 40. 203-40.
http://www.persee.fr/web/revues/home/prescript/article/jsa_0037-9174_1951_num_40_1_2543. (26 May, 2011)
- Rose, Françoise. 2010. Irrealis and negation in Mojeño Trinitario, a South Arawak language. Paper presented at the SSILA Winter Meeting, Baltimore, 8 January 2010.

- Sasse, Hans-Jürgen. 1992. 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.
- Seifart, Frank, Rosa Andrade & Pablo Andrade. 2008. Elicitación palabras del diccionario de Allin, parte 1 a parte 3. In Frank Seifart, Doris Fagua, Jürg Gasché & 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/ds/imdi_browser/?openpath=MPI875532%23. (26 May, 2011)
- Seifart, Frank & Juan Alvaro Echeverri. 2010. Towards a re-evaluation of the Boran-Witotoan family/ies (North West Amazon). The First Conference on ASJP and Language Prehistory (ALP-I) Max Planck Institute for Evolutionary Anthropology, Leipzig, September 17-19.
- Seifart, Frank. 2005. *The structure and use of shape-based noun classes in Miraña (North West Amazon)*. (MPI Series in Psycholinguistics 33). Nijmegen: Max Planck Institute for Psycholinguistics.
- Seifart, Frank. 2007. The prehistory of nominal classification in Witotoan languages. *International Journal of American Linguistics* 73(4). 411-445.
- Seifart, Frank. 2009. Resígaro documentation. In Frank Seifart, Doris Fagua, Jürg Gasché & 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. (26 May, 2011)
- Seifart, Frank. 2010. Causative marking in Resígaro (Arawakan): A descriptive and comparative perspective. Forthcoming in *International Journal of American Linguistics*.
- Seifart, Frank. 2011. The Principle of Morphosyntactic Subsystem Integrity in language contact: Evidence from morphological borrowing in Resígaro (Arawakan). Max Planck Institute for Evolutionary Anthropology, Leipzig. Manuscript.
- Tadmor, Uri. 2009. Loanwords in the world's languages: Findings and results. In Martin Haspelmath & Uri Tadmor (eds.), *Loanwords in the World's Languages. A Comparative Handbook*, 55-75. Berlin: Mouton de Gruyter.
- Tessmann, Günter. 1930. *Die Indianer Nordost-Perus: grundlegende Forschungen für eine systematische Kulturkunde*. Hamburg: Friederichsen, de Gruyter.
- Thiesen, Wesley & Eva Thiesen. 1998. *Diccionario Bora - Castellano, Castellano - Bora*. (Serie Lingüística Peruana 46). Yarinacocha: Instituto Lingüístico de Verano. http://www.sil.org/americas/peru/show_work.asp?id=38825. (26 May, 2011)
- Thiesen, Wesley. 1996. *Gramática del idioma Bora*. (Serie Lingüística Peruana 38). Yarinacocha: Instituto Lingüístico de Verano. http://www.sil.org/americas/peru/show_work.asp?id=36936&Lang=eng. (26 May, 2011)

- Tsitsipis, Lukas D. 1998. *A linguistic anthropology of praxis and language shift: Arvanitika (Albanian) and Greek in contact*. (Oxford Studies in Language Contact). Oxford: Clarendon Press.
- Valcárcel, Carlos A. 2004. *El proceso del Putumayo y sus secretos inauditos*. (Monumenta Amazónica Serie E 1). Iquitos, Peru: CETA.
- Voegelin, Charles Frederick & Florence Marie Voegelin. 1977. *Classification and index of the world's languages*. (Foundations of Linguistics). New York: Elsevier.
- Walton, James W., Janice P. Walton & Clementina Pakky de Buenaventura. 1997. *Diccionario bilingüe muinane-español, español-muinane*. Santafé de Bogotá: Editorial Alberto Lleras Camargo.
- Wavrin, Robert de. no date. Resigaros, eux dissent Rrahanihin. Unpublished manuscript from the Archives of Professor Paul Rivet, Paris.
- Weinreich, Uriel. 1953. *Languages in Contact*. New York: Linguistic Circle of New York.
- Whiffen, Thomas. 1915. *The North-West Amazons: notes of some months spent among cannibal tribes*. London: Constable. [\[EtnoLink\]](#)
- Wilbert, Johannes. 1987. *Tobacco and Shamanism in South America*. New Haven, London: Yale University Press.
- Wilkins, David P. 1996. Morphology. In Hans Goebel, Peter H. Nelde, Zdenek Starý & Wolfgang Wölck (eds.), *Contact Linguistics. An International Handbook of Contemporary Research*, vol. 1, 109-117. Berlin, New York: Mouton de Gruyter.
- Wilson, Peter J. & Stephen H. Levinsohn. 1992. *Una descripción preliminar de la gramática del achagua (Arawak)*. Bogotá: Instituto Lingüístico de Verano.

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Bora loans in Resígaro: Massive morphological and little lexical borrowing in a moribund Arawakan language

by *Frank Seifart*

This study analyzes the influence of Bora (Boran) on Resígaro (Arawakan), two languages of the Colombian-Peruvian Amazon region, using a newly discovered Resígaro wordlist from the 1930s (Manuel María de Mataró no date), another wordlist from the late 1920s (Rivet & Wavrin 1951), and another from the early 1970s (Allin 1976:382-458). It shows that despite heavy structural and morphological influence (Aikhenvald 2001:182-190) Resígaro has borrowed relatively few lexical items, around 5% in all three sources. It also shows that the borrowing of entire sets of grammatical morphemes, including classifiers, number markers, and bound grammatical roots that is observable in contemporary Resígaro (Seifart 2011) goes back to at least the early 20th century. This suggests that this remarkable case of massive morphological borrowing is not merely an effect of language decay, linked to the current language endangerment situation of Resígaro, with only two surviving speakers.

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