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The Amazon Basin: Linguistic Areas and Language Contact

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1. Areal Diffusion and Language Contact in the Amazon Basin: A Preamble

The Amazon Basin – the world’s largest river system – is home to an extremely high linguistic diversity (rivalled only by the island of New Guinea). It comprises around 350 extant languages grouped into over 15 language families, in addition to a number of isolates. The consensus among archaeologists is that the Americas were first populated about 12,000 years ago, possibly in successive waves of migration (a brief history and references are in Aikhenvald 2012a: 2–17, 2013). As a result of population movements, the linguistic map of Amazonia resembles a patchwork quilt. Most major families are spoken in several disconnected geographical locations.¹

With extensive migrations and subsequent interactions of peoples and of languages, the Amazon Basin is a likely hot spot for language contact and formation of linguistic areas. The linguistic picture of Amazonia is, however, obscured by the fact that over 60 percent of indigenous languages are estimated to have become extinct since the European conquest

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¹ Various attempts have been made, during the past two centuries, to align different families as part of macro-groupings or “stocks,” none of them with a solid backing of consistent proof (such as the putative “Amerind,” “Macro-Equatorial,” or “Arawakan” said to encompass Arawak proper (or Maipuran), Arawá, Chapacura, Guahiboan, and Uru-Puquina (Aikhenvald 1999a, 2015)). An up-to-date classification of Amazonian languages, with names for Amazonian families, is provided in Aikhenvald (2012a: 19–23, 2015).

Abbreviations in this chapter: CL – classifier, FEM – feminine, NF – non-feminine, NUM.CL – numeral classifier, O – object, So – stative subject, SG – singular.

(Adelaar 2000, 2004, Loukotka 1968, Hemming 1987, Dixon & Aikhenvald 1999a, Dixon & Aikhenvald 1999b, Aikhenvald 2012a). Massive language loss, especially in the areas of the head waters of the Amazon and Eastern Brazil occupied by Europeans soon after the invasion, makes the task of revealing the exact linguistic picture and the past patterns of language interaction in Amazonia truly daunting. As a consequence of constant pressure from major national, and sometimes other indigenous, languages, most indigenous languages of Amazonia are currently endangered. The effects of language obsolescence further complicate the study of contact-induced change.

As numerous indigenous groups became depleted due to epidemics and raids, survivors from one group amalgamated with their neighbors of different – and often no longer known – origins. For instance, Amuesha (or Yanesha'), an Arawak language from Peru, has a number of non-Arawak structural and lexical features. Only a minority of these can be explained by contact with their neighbor, Quechua. The origin of others remains unknown (Adelaar 2006). Most indigenous languages in the area disappeared without trace. In the absence of reliable data and historical records, we may never be able to go beyond mere hypotheses about possible paths of contact-induced change.

If a number of languages are spoken in a geographically continuous area, with groups interacting with each other and having to learn each other's languages, linguistic traits will spread, or diffuse, from language to language, until each applies across the area. A linguistic area, *aka* "Sprachbund," is formed (see also Friedman, this volume).

A LINGUISTIC AREA is defined as a geographic region including languages from at least two language families or different subgroups of the same family. These languages would share a significant number of phonological, morphological, syntactic, and lexical features not found in related languages spoken outside the area. Each of such diagnostic features needs to be fairly unusual. These should not be due to chance, typological similarity, or common ancestry. Ideally, a linguistic area will also be characterized by demonstrable contact between speakers with some knowledge of each other's languages, in addition to shared cultural traits. The emergence of a linguistic area involves substantial length of time for the shared features to become well-established in each language.²

If a language is strikingly different from its proven genetic relatives and shows features in common with its unrelated neighbors, language contact will be the "usual suspect." For instance, possessive and locative classifiers and a minimal-augmented pronominal system in Palikur, a North Arawak language spoken in the adjacent areas of Brazil and French Guiana, are unusual for an Arawak language, as well as shared similarities with the

² See Emeneau (1956), Tosco (2000), Heine & Kuteva (2005: 172–9), and chapters in Aikhenvald & Dixon (2006) for the notion of LINGUISTIC AREA.

neighboring Carib languages. Long-term contacts of the Palikur with Carib-speaking Galibi and possibly other Carib peoples suggest that these phenomena in Palikur could be due to Carib influence (Aikhenvald 2018). However, one-on-one interaction between individual languages does not imply the existence of a linguistic area.³

Many long-standing areas may have existed in pre-conquest Amazonia. But very few have been documented. A well-established linguistic area within Amazonia with ongoing contact between languages is the Vaupés River Basin, located in a far-away corner of Brazil and Colombia. Languages from several unrelated families – Arawak, East Tucanoan, and, marginally, the members of two genetic units within the “Makú” cultural complex – interact based on patterns of societal multilingualism, regulated by exogamous marriage networks and divisions of labor between groups. We turn to this in Section 2. A number of shared linguistic features in languages adjacent to the Vaupés River Basin are suggestive of linguistic diffusion in the past – see Section 3. The Upper Xingu region is a well-established cultural area within Amazonia and may be considered an incipient linguistic area – this is the topic of Section 4. Further possible instances of areal diffusion in the Amazonian Lowlands are the topic of Section 5. In Section 6, we address a number of linguistic features shared by Amazonian languages as a whole.

2. The Vaupés River Basin as a Linguistic Area

The multilingual Vaupés River Basin in Northwest Amazonia, panning adjacent areas of Brazil and Colombia, is a well-established linguistic area. Its major cultural feature is obligatory societal multilingualism based on the principle of linguistic exogamy. This is how speakers within the area phrase it: “Those who speak the same language with us are our brothers, and we do not marry our sisters.” Language affiliation is inherited from one’s father, and is a badge of identity for each person.⁴ In Section 2.1, we start with the linguistic diffusion within the core of the area, where the exogamous marriage network is at work. In Section 2.2, we turn to areal diffusion in the periphery of the area, beyond the exogamous marriage network.

³ Instances of individual contact include Mawayana (Arawak) with Wai Wai and Trio (Carib) on the frontier between Brazil, Guyana, and Suriname (Carlin 2006), and Bora (Bora) and Resigaró (Arawak) in the Caquetá River Basin in Colombia (Aikhenvald 2001, Seifart 2011).

⁴ See Aikhenvald (2012a: 75–83) and references therein; Stenzel & Khoo (2016) contains a brief history of studies of the Vaupés area. Additional restrictions on marriage alliances in the area may be partly explained by the common origins of some groups. The Tariana do not intermarry with the Desano, perhaps due to the putative Arawak origins of the Desano (Koch-Grünberg 1906a; Dominique Buchillet, p.c. 2000). The Wanano and the Piratapuya, who speak very closely related languages, do not intermarry; neither do the Tucano and the Barasano.

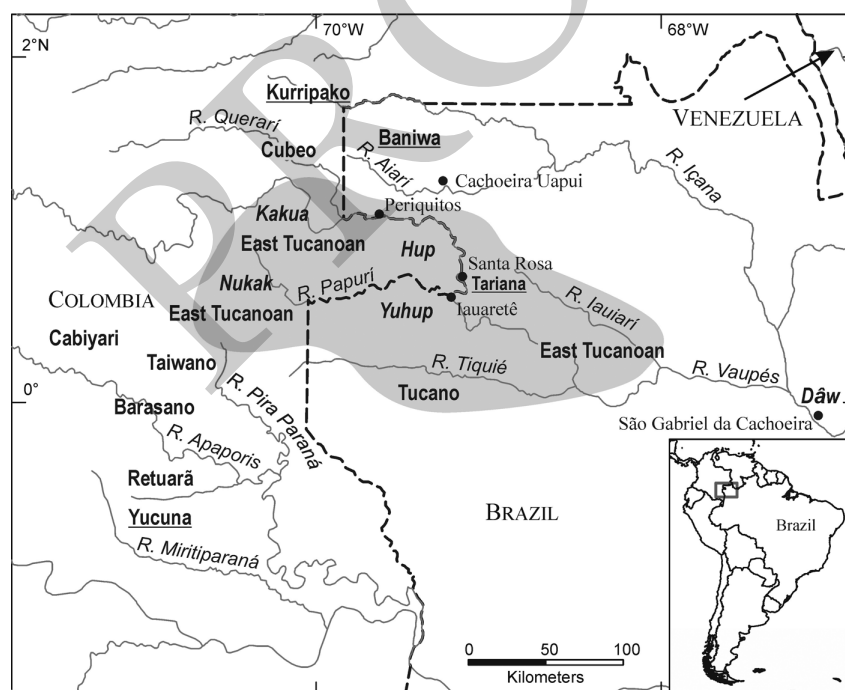
2.1. Linguistic Diffusion within the Exogamous Network in the Vaupés River Basin Area

Languages traditionally spoken within the exogamous marriage network of the Vaupés River Basin belong to two unrelated genetic groups. East Tucanoan languages (including Tucano, Wanano/Kotiria, Desano, Tuyuca, Piratapuya/Waikhana, Barasano, Siriano, and a few others) are spoken on the Colombian and the Brazilian sides of the area. Tariana, an Arawak language, is spoken exclusively in Brazil. Map 8.1 shows languages spoken in the Vaupés Basin. The linguistic area itself is shaded on the map. Several East Tucanoan languages are spoken in each of the locations on the map marked simply as “East Tucanoan.”

Traditionally, every East Tucanoan and Tariana would speak, on average, four to five languages, namely:

- the language of one’s father, which is what a person would identify with;
- the language of one’s mother (that is, the latter’s father’s language);
- plus the languages known, through their mothers, by other children living in the same settlement (traditionally, a longhouse).

At present, many are also proficient in Spanish (in Colombia) or Portuguese (in Brazil), the two national languages. To qualify as a speaker



Map 8.1: Languages of the Vaupés and the Içana river basins (the Vaupés River Basin linguistic area is shaded)

of a language, one has to have a very high level of proficiency, as first noticed by Sorensen (1967). We are faced with one of the most multilingual societies in the world.

The East Tucanoans and the Tariana live on the riverbanks and share numerous cultural features, including slash-and-burn agriculture.⁵ A striking feature of the linguistic ideology across the Vaupés area is a strong cultural inhibition against language mixing viewed in terms of borrowing forms. This is not to say that there are no borrowed forms; they are few, however, hard to recognize, and generally avoided (see the discussion and references in Aikhenvald 2012b). The long-term interaction based on institutionalized multilingualism between East Tucanoan languages and Tariana has resulted in rampant diffusion of grammatical and semantic patterns (rather than forms) and in the calquing of categories. These span almost every area of phonology and grammar.

East Tucanoan languages are closely related and spoken exclusively within the Vaupés area. Typological similarities between them can be accounted for, firstly, by shared heritage and, secondly, by Sapir's (1921: 171–2) "parallelism in drift," which would account for additional similarities between related languages, even those "long disconnected." Thirdly, pre-existing similarities due to common ancestry are being continuously reinforced by ongoing contact between speakers within the network of multilingual exogamy. Disentangling the impact of these three groups of factors is a daunting, if not impossible, task. The other subgroup of Tucanoan consists of West-Tucanoan languages: Siona, Secoya, Orejón, and Koreguaje, spoken in Colombia, and adjacent parts of Ecuador and of Northeastern Peru, outside the Vaupés area. Comparing East Tucanoan and West Tucanoan languages in terms of their lexical and grammatical features helps understand the special features and innovations in East Tucanoan as a subgroup (see Barnes 1999, Stenzel & Gomez-Imbert 2018).

In contrast, Tariana is a near-perfect case for identifying contact-induced change. Tariana is part of a subgroup within North Arawak, together with the Baniwa of Içana-Kurripako dialect continuum, Piapoco, Guarequena, Achagua, Yucuna, and Resígaro. Linguistic affinities are corroborated by shared-origin myths: all these peoples claim to have originated in the same place, viz., the Wapuí waterfall area on the Aiary River (a tributary of the Içana River). Comparing Tariana with related languages spoken outside the Vaupés area allows us to trace patterns acquired under East-Tucanoan influence, teasing them apart from those inherited from Proto-Arawak.⁶

⁵ See Stradelli 1890, Brüzi 1977, and a summary in Aikhenvald 2002, 2012a: 75–83. Further shared features, including hierarchically organized clans (or "sibs") with distinctive dialects, are discussed by Chernela (1993) on the Wanano, and by S. Hugh-Jones (1979) and C. Hugh-Jones (1979) on the Barasano, as well as by Aikhenvald (2003a, 2014) on the Tariana.

⁶ See Aikhenvald (2002, 2006, 2014, 2015, 2018) for further discussion of the patterns of diffusion and their impact on Tariana. Sorensen (1967) focused just on the East Tucanoan languages in the Colombian part of the Vaupés area.

The following linguistic properties define the languages of peoples who form the exogamous marriage network within the multilingual area of the Vaupés River Basin (see further discussion in Aikhenvald 2011: 24, 2012a: 75–83):

- (i) Evidentiality (i.e. grammaticalized marking of information source) fused with tense: four to five evidentials mark the way in which the speaker has acquired information, that is, whether it was seen, heard, inferred, assumed, or learnt from someone else;
- (ii) Large sets of classifiers used with demonstratives, with number words, and in possessive constructions, referring to shape, form, and other physical properties of inanimate entities;
- (iii) Small systems of genders in pronouns and in verbal agreement;
- (iv) Case marking: a nominative–accusative profile with differential object marking, whereby a definite or topical object receives case marking;
- (v) One locative case covering direction ('to'), location ('in, at'), and source ('from');
- (vi) Single-word verb serialization (sometimes referred to as verb compounding), expressing aspect and manner;
- (vii) Nasalization that occurs on most or all segments in a word;
- (viii) Lexical features, e.g., one term for 'sun' and 'moon', and shared collocations, e.g. 'father of goods' = 'rich man'.

Further characteristics include allophonic variations between the dental stop and a rhotic flap, multiple imperative forms expressing politeness and distance in space and in time, and discourse techniques, such as summary linkage and bridging linkage (Aikhenvald 2002: 159–66, 2011, 2019a).

Examples (1) and (2) illustrate structural parallelism between Tariana and Tucano, the two unrelated languages in contact. Examples come from traditional stories involving a female cannibal (recorded by the author several times). The meanings and the order of the morphemes in these two examples are almost identical. But there are hardly any cognate morphemes: it is as if different content has been poured into similar moulds.

- (1) nese pa:ma diha-naku Tariana
 then one+NUM.CL.ANIMATE.FEM he-OBJECT
du-yana-sita-pidana
 3SG.FEM-cook-do.already-REMOTE.PAST.REPORTED
 'Then she had reportedly cooked him already'
- (2) tiŋta ni'kó ki\$ŋ-re Tucano
 then one+NUM.CL.ANIMATE.FEM he-OBJECT
 do'á-toha-po'
 cook-do.already-REMOTE.PAST.REPORTED.3SG.FEM
 'Then she had reportedly cooked him already'

The equivalence is not complete. Tariana preserves its person-marking prefixes inherited from Proto-Arawak (see Aikhenvald 2002 on person markers as the most stable feature of Arawak languages). Tucano marks person with suffixes fused with evidentiality and tense.

The tangible structural impact of East Tucanoan on Tariana is recognizable through comparison between Tariana and its close relatives from the Arawak family. We now compare the Tariana sentence with its equivalent in Baniwa of Içana, closely related to Tariana but spoken outside the Vaupés area. The Baniwa forms are cognate to those in Tariana, but the categories and the meanings expressed are very different. Baniwa and Tariana cognates are underlined in (1) and (3).

- (3) hnette-pida apa:ma rhu-dzana-ni rhu-ttaita Baniwa
 then-REPORTED one+CL.FEM 3SG.FEM-cook-3SGNFO/So 3SG.FEM-finish
 ‘Then she had reportedly finished cooking him’

Baniwa *apa-* ‘one’ corresponds to Tariana *pa-* ‘one’ (both are reflexes of the Proto-Arawak form **ba* ‘one’). Tariana *y* in *-yana* ‘cook’ corresponds to Baniwa *dz*, and Tariana *d-* in the 3SG.FEM prefix *du-* corresponds to Baniwa *rh-*. (Both forms go back to Proto-Arawak *ru-/lu-* ‘third person feminine prefix’: see Appendix 2 in Aikhenvald 2002).

The grammatical differences between Tariana and Baniwa reflect the Tucanoan impact on Tariana and illustrate three of the defining features of the Vaupés languages (absent from Baniwa): (i) evidentiality, (iv) case-marking, and (vi) single-word verb serialization.

- (i) EVIDENTIALITY: In both Tariana and Tucano the marker combining information on tense and evidentiality (in this case, REMOTE PAST REPORTED) attaches to the verb (see Aikhenvald 2003b on the development of case and evidentiality in Tariana under Tucanoan influence). In contrast, Baniwa has only one, optional, clitic with the meaning of reported evidential and no tense distinction; in (3) it attaches to the first word in the clause.
- (iv) CASE-MARKING: The case marker *-naku* on the pronoun ‘he’ in (1) from Tariana matches the case marker *-re* in (2) from Tucano. Both case morphemes mark definite and topical objects (and a number of other, non-subject constituents) and are obligatory on personal pronouns. The marker *-re* is a feature of all the East Tucanoan languages (Barnes 1999, 2009; Aikhenvald 2006 and references therein, and Stenzel 2008). In contrast, Baniwa lacks cases; a bound pronoun marks the pronominal object ‘him’ (a feature inherited from Proto-Arawak; see Aikhenvald 1999a: 88). The Tariana case marker *-naku* developed out of a locative case; the cognate form *-naku* ‘locative (on the surface)’ is in use in Baniwa.
- (vi) SINGLE-WORD VERB SERIALIZATION: The same etymon, Tariana *-sita* and Baniwa *-ttaita* ‘finish’, behaves differently in (1) and in (3): in Baniwa it is part of a multi-word serial verb construction, while in

Tariana it is a single-word serial verb construction with an aspectual meaning ALREADY, just like in Tucano, in (2). Tariana *s* regularly corresponds to the Baniwa lamino-alveolar stop (spelt as *tt* in the practical orthography). The diphthong *ai* in Baniwa is contracted to *i* in Tariana. Hence the correspondence of Baniwa *-ttaita* ‘finish’ with Tariana *-sita* ‘do already’. The marker is the same as the verb *-sita* ‘finish’. The verbal root *-sita* expresses aspect, mirroring a Tucanoan structure.

Furthermore, in agreement with (v) above, Tucano and other East Tucanoan languages have just one locative case marker (Tucano and Wanano *-pi*, Barasano *-hi*, Desano and Siriano *-ge*). Tariana also has just one (*-se*, a cognate to Baniwa *-h|e* ‘towards’). In contrast, Baniwa has a number of locational cases.

The use of shape and form classifiers, as in (ii) above, is shared by Tariana and East Tucanoan languages. Firstly, East Tucanoan languages and Tariana employ classifiers with demonstratives. In contrast, demonstratives in Baniwa distinguish masculine and feminine genders, and do not occur with classifiers.

Secondly, classifier systems in Tariana and in East Tucanoan languages are not used to categorize animate referents. In contrast, shape classifiers in Baniwa can be applied to all referents. So, for instance, the term for ‘snake’ in Tariana and in Tucano requires an animate classifier, e.g., Tariana *pa-ita āpi* (one-CL.ANIMATE snake), Tucano *ni’kâ pi)rô* (one+CL.ANIMATE.NF snake ‘one snake’). In contrast, in Baniwa, the term for ‘snake’ requires a classifier for curved entities, e.g. *apa-kha api* (one-CL.CURVED snake) ‘one snake’.

Lexical properties shared by Tariana and East Tucanoan languages include having the same word for moon and sun, e.g., Tariana *ke:ri*, Tucano *muhîpuju*, Wanano *sû*, Desano *abe*, Kubeo *aviá* ‘sun/moon’. Baniwa and all other Arawak languages employ reflexes of Proto-Arawak **kahitsi* ‘moon’ (the ancestor of Tariana *ke:ri* ‘sun, moon’) and **kamui* ‘sun’ (which survives in Tariana *kamu-yapi* ‘year’ and *kamuhu* ‘summer heat’). Many West Tucanoan languages have different words for ‘sun’ and ‘moon’ – an indication that this polysemy is Vaupés-specific.⁷

The constant interaction of languages within the unavoidably multilingual society in the Vaupés Basin has created a situation of multilateral diffusion, resulting in a few identifiable instances of Tariana influence on East Tucanoan languages. Phonemic aspiration of stops in Wanano, absent from most other East Tucanoan languages, can be attributed to the influence of Tariana, which shares them with related North Arawak languages. Incipient pronominal proclitics in Wanano and in Desano (absent from other East Tucanoan languages) can also be

⁷ E.g., Siona *ñañaguê* ‘moon’, *ênsêquê* ‘sun’ (Wheeler 1987: 21, 59), and Koreguaje *pāimiau* ‘moon’, *u)suu* ‘sun’ (Cook, Gralow, & de Young 2001: 162, 181).

considered the result of North Arawak influence. Tariana is the most likely source of this feature.⁸

At present, Tucano is rapidly gaining ground as the major language of the Brazilian Vaupés, at the expense of other languages. This is a consequence of the Catholic missionaries' language and education policy, which implemented Tucano as the main language and aimed at eradicating a "pagan" multilingualism (Aikhenvald 2002). As Tucano is coming to be the dominant language among Indians in the Brazilian Vaupés, a peculiar situation arises. While marriage is still based on one's father's language allegiance, the language itself may no longer be spoken. People admit to speaking a language different from that of their father, which is rightfully theirs, and lament having to speak what they call a "borrowed" language. Many complain that this makes them feel inferior. The numbers of speakers of languages other than Tucano, including Tariana, is decreasing. At the same time, the influence of Tucano on extant languages is strengthening, transforming the erstwhile situation of multilateral diffusion into unilateral influence from Tucano (Aikhenvald 2006). The situation appears not to be so drastic in Colombia. The degree of language endangerment in the Colombian Vaupés is considerably less pronounced.

2.2. Beyond Linguistic Exogamy: The "Makú" Peoples within the Vaupés River Basin Area

The river-dwelling Indians of the Vaupés River Basin – which make up the core of the areal diffusion based on the principle of linguistic exogamy – coexist with a cultural group of indigenous peoples who live away from the main river, the so-called "Makú." The latter are essentially nomadic hunters and gatherers, some of whom have recently acquired slash-and-burn agriculture from their Tucanoan-speaking neighbors. They do not participate in the marriage network based on linguistic exogamy and are considered inferior by those who do.⁹

From a linguistic perspective, groups traditionally referred to as "Makú" fall into two genetic units, not demonstrably related. The first comprises Hup and Yuhup, which are closely related and are spoken off the Papurí and Tiquié Rivers (tributaries of the Vaupés, in Brazil and Colombia: see Map 8.1). The third member of the unit, Dâw (Martins 1994, 2004, Martins & Martins 1999), is spoken outside the area, on the Upper Rio Negro (see Epps & Bolaños 2017).

The second unit consists of Kakua, spoken between the Papurí and the Vaupés rivers, mostly in Colombia, and its close relative Nikak (or Nukak),

⁸ See Stenzel (2014: 194–5), Waltz & Waltz (1997: 37), Miller (1999: 162), and Aikhenvald (2002: 61) for further details. Note that the Wanano are the preferred marriage partners of the speakers of extant Tariana varieties.

⁹ See Silva & Silva (2012: 71–3, 77) and references therein for intra-clan exogamy and the emergence of slash-and-burn agriculture among the Yuhup, Hup, and other "Makú" groups; and Epps (2008: 14–15) on the Hup.

spoken in the vicinity of the Inirida and the Guaviare rivers in Colombia (further away from the Vaupés: see Bolaños Quiñónez 2016, 2018). The name *Makú* is of Arawak origin (Koch-Grünberg 1906a) and consists of *ma-* ‘negation’ and *-aku* ‘speak’, both forms attested in Tariana¹⁰ and in Baniwa.

The “Makú” peoples within the Vaupés display a symbiotic relationship of mutual dependency with the members of the exogamous linguistic network in the Vaupés linguistic area.¹¹ Each East Tucanoan group would have a “Makú” group of their own who would supply them with game and arrow poison, and perform minor services. In exchange, the East Tucanoans would provide them with garden produce, including the starch staple: manioc and manioc flour. The Makú would be looked down upon by the River Indians as being animal-like (see Silverwood-Cope 1990: 129–30 for some illustrative accounts of interactions between the Makú and the River Indians). In actual practice, the Makú have never been bound to perform services for River Indians; the latter can always run away to the jungle if they so wish, and if they feel mistreated. In terms of their institutionalized links with the River Indian groups, the Hup are known as the Makú of Tucano or Makú of Desano, and the Kakua (or Bara) are sometimes referred to as the Makú of Kubeo or Makú of Wanano (Silverwood-Cope 1990; Martins & Martins 1999: 253).¹² The Makú people are believed to be the original inhabitants of the area.

Among the forest-dwelling “Makú” peoples (that is, Hup, Yuhup, Kakua), just some men have a limited knowledge of the river-dweller languages, facilitating exchange relationships between the groups (Epps 2008: 27; Silva & Silva 2012; Silverwood-Cope 1990; Bolaños Quiñónez 2016). Members of the exogamous marriage network, East Tucanoans and Tariana, have no knowledge of the Makú languages, which they mock as reminiscent of animal cries. This is in contrast to the situation within the exogamous marriage network among river-dwelling groups along the Vaupés River (Section 2.1). Interactions between the Makú, the East Tucanoans, and the Tariana in the Vaupés River Basin area involve limited proficiency in the other group’s language and no institutionalized multilingualism.

As a result of the ongoing long-term interactions with the East Tucanoan speakers, Hup-Yuhup and Kakua manifest a number of features typical of the Vaupés River Basin languages. Hup and Yuhup share restrictions on loan forms with the other members of the Vaupés area, so the shared features tend to be limited to structural patterns.

¹⁰ The noun *maku*, plural *makine*, means ‘slave, servant, descendant’ in Tariana. It appears in a self-denomination of the Tariana of Periquitos: *enu-makine*, lit. ‘descendants of thunder’.

¹¹ This relationship is commonly referred to as “patron–client.” See a comprehensive discussion and further references in Silva & Silva (2012). (Koch-Grünberg 1906a called it “slavery.”)

¹² In the past, the Tariana used to have “Makú” of their own. They were called *Maihe* and are said to have been transported to Manaus by white slavers a few generations ago, or have run away. The Tariana are known to have sold some of their “underling” groups into slavery to the Portuguese in the eighteenth and nineteenth centuries. Wright (2005) and Hemming (1987) provide some details.

The features shared with those of the core Vaupés area (Section 2.1) include (i) a system of four to five evidentials, (iv) differential object marking, (v) one locative case, (vi) single-word verb serialization, (vii) nasalization within a word, and (viii) lexical features, such as one term for ‘sun’ and ‘moon’.¹³ The diffusional origin of the features characteristic of the Vaupés languages is corroborated by the absence of many of them in Dâw, spoken outside the Vaupés area.¹⁴

The diffusion of patterns here is unilateral, from an individual East Tucanoan language into each of Hup, Yuhup, or Kakua. This is quite unlike the multilateral patterns of language interaction within the Vaupés languages, which form a multilingual network supported by the language-based exogamy. This is what sets the languages of the Makú complex apart from those of the core Vaupés River Basin area.

Features shared by the languages of the Makú cultural complex with those of the Vaupés exogamous network may have a further historical explanation. Oral histories of East Tucanoans and of the Tariana suggest that some of their lower-ranking subclans were originally forest-dwelling “Makú” who had lost their ancestral languages and got integrated into the mainstream exogamous groups. The rival subclans of the Tariana frequently accuse each other of being inferior “ex-Makú” (see Aikhenvald 2006; and also Koch-Grünberg 1906a, 1906b on the Desano). Structural similarities between Tariana and East Tucanoan languages, on the one hand, and Hup, Yuhup, and Kakua, on the other, may well have arisen from shared substrata. Language loss and absorption of one group by another in the Vaupés area add further complexity to the linguistic history and the linguistic profile of the region.

The origins and the age of the Vaupés River Basin linguistic area and the language-based exogamy are a matter of dispute (Aikhenvald 2002: 3). The East Tucanoans are believed to have come to the Vaupés from the west (splitting off from the West Tucanoan branch; cf. Nimuendajú 1982). The Tariana are the most recent arrivals in the area. Historical records and origin myths indicate that the Tariana arrived in the Vaupés from the Içana River Basin and its tributaries in the Upper Rio Negro region, most likely, a short time before the European invasion. This takes us to further possible instances of areal diffusion within a larger geographical domain.

3. Areal Diffusion beyond the Vaupés River Basin

The Vaupés River Basin linguistic area is located within the basin of the Upper Rio Negro, a major tributary of the Amazon. In terms of shared

¹³ See Silva & Silva (2012: 79) on Yuhup, Epps (2006b) on Hup, and Bolaños Quiñónez (2016) on Kakua. None of the languages have (iii) genders or (ii) large sets of classifiers in multiple contexts.

¹⁴ At present, little is known about Nukak, spoken further away from the Vaupés area. Nukak does not appear to be in contact with Tucanoan languages and lacks many of the typical features of the Vaupés.

practices, myths, and traditions, the Upper Rio Negro constitutes a cultural area (Nimuendajú 1982, Epps & Stenzel 2013a, Epps & Stenzel 2013b, Aikhenvald 1999b). The Baniwa of the Içana–Kurripako dialect continuum (closely related to Tariana) is spoken in the Içana River Basin and along its tributaries, bordering on the Vaupés and extending further to the north into Venezuela and northeast into Colombia. In contrast to the Arawak- and Tucanoan-speaking peoples of the Vaupés River Basin, the Baniwa of Içana–Kurripako do not partake in multilingual exogamy. Regular contacts between the East Tucanoans of the Vaupés and the Tariana, on the one hand, and the Baniwa, on the other, are limited.¹⁵ Example (3) shows striking structural differences between Tariana and Baniwa. But this is not the end of the story.

The Baniwa of Içana–Kurripako do share a number of cultural features with the indigenous groups of the Vaupés, which may be indicative of older contacts. These include the structure of the kinship system (de Oliveira 1975), patrilineal descent, a number of traditions and myths, the festival of Dabukuri (an offering accompanied by drinking manioc beer and ritual dance), and the cult of the magic character Yurupary, associated with male initiation and fertility rites (Brüzzi 1977: 314–15; Hill 2001: 56–9; S. Hugh-Jones 1979, Reichel-Dolmatoff 1996). A few linguistic features are shared by Baniwa of Içana–Kurripako and the languages of Vaupés but not by closely related North Arawak languages spoken in the Upper Rio Negro basin.

Firstly, East Tucanoan languages, Tariana, and Baniwa of Içana–Kurripako have large systems of classifiers used with number words and with quantifiers, adjectives, interrogatives, possessive constructions, and as derivational markers on nouns. Tariana and East Tucanoan languages also use them with demonstratives, while Baniwa–Kurripako does not (see Section 2.1 and examples (1)–(3)). Piapoco, spoken to the west of the Upper Rio Negro area in Colombia, and Guarequena, spoken to the northeast in Venezuela and formerly adjacent areas of Brazil, are closely related to Tariana and Baniwa–Kurripako. None of them has classifiers of any sort.¹⁶

Secondly, East Tucanoan languages, Tariana, and Baniwa of Içana–Kurripako share a possessive marker *-ya-* accompanied by a classifier (Stenzel 2013, Ramirez 1997: 325 on Tucano, Aikhenvald 1999b: 408–9). This feature is absent from other North Arawak languages.

Thirdly, the valency rearranging passive-like suffix *-ni* in Baniwa of Içana–Kurripako and Tariana shows structural similarities with the suffix *-no'o* in Tucano and a number of other East Tucanoan languages. No other North Arawak language has any cognate morphemes. All these similarities are suggestive of areal diffusion beyond the Vaupés within a larger region of

¹⁵ See Aikhenvald (2002: 206–7, 2014) on the relatively recent trilingual Baniwa–Tariana–Tucano contact, which has resulted in the emergence of a new mixed language.

¹⁶ Small sets of numeral classifiers are found in a number of Arawak languages of the Upper Rio Negro and adjacent areas (Yucuna, Achagua; see Aikhenvald 2019b).

the Upper Rio Negro, which could have constituted a linguistic area in the past.

The only historically documented instance of one-to-one contact between Baniwa of Içana and a Tucanoan language is that between Baniwa and Kubeo. The latter language is spoken on the Querarí, a tributary of the Vaupés, which borders the Içana Basin (Goldman 1979, Gomez-Imbert 1996: 445–6, Chacon 2013). As a consequence of Baniwa influence, nouns referring to animals in Kubeo occur with shape-based classifiers, following a pattern described in Section 2.1.¹⁷

The region between the Caquetá and the Putumayo rivers in the Colombian Amazon, located further to the southwest of the Vaupés River Basin, encompasses eight linguistic groups. Three of these belong to the Witotoan family, and three to the Bora family, in addition to one North Arawak language, Resígaro, and one isolate, Andoké. Residents of this cultural area have been referred to as “The People of the Center of the World” (Echeverri 1997: 27) or as “Children of Tobacco, Coca and Sweet Yucca” (Wojtylak 2017, 2019). They share numerous traits, including ritual activities involving pounded coca and licking tobacco (rather than inhaling it), and communicating with signal drums *manguaré*. However, the evidence in favor of a linguistic area there is inconclusive. Bora and Witotoan languages could be genetically related (Wise 1999). Resígaro has acquired numerous structural similarities and borrowed morphemes based on one-to-one contact with the unrelated Bora (Aikhenvald 2001, Seifart 2007, 2011). However, a few distinctive traits are shared by the languages of Caquetá-Putumayo Basin and of the neighboring Vaupés River Basin area. The features include a nominative–accusative profile, differential object marking, large systems of classifiers used in multiple contexts (with adjectives, with number words, in possessive constructions, on nouns themselves, and with demonstratives), and the structure of number words (Wojtylak 2017, Epps 2006a, Seifart & Payne 2007).

Earlier records suggest that at least some individual groups of the People of the Center may have been in contact with the ones currently residing in the Vaupés River Basin. Based on his travels in Brazil in the second decade of the nineteenth century, von Martius (1867: 1.537) reported that the Tariana and two other groups, Miranha Carapana-tapuya (possibly a Witoto-speaking group) and Miranha Oirá-Açu-tapuya (possibly speakers of a dialect of Bora), were in contact in the region between the Caquetá and the Vaupés River basins.¹⁸ The migrations of the Tariana in the Caquetá

¹⁷ See Gomez-Imbert 1996: 447–63 on this, and a few other Baniwa features in the language. Another instance of Tucanoan–Arawak contact on the southern edge of the Vaupés area involves Cabiari, an endangered Arawak language spoken in the basin of the Cananari River (a tributary of the Apaporis River), whose speakers are fluent in two Tucanoan languages, Barasano-Taiwano and Tanimuca-Retuarã. Preliminary work (Reinoso Galindo 2012) shows some features, such as classifiers on demonstratives, that may be due to Tucanoan influence.

¹⁸ Von Martius (1867: 2.279–81); Wojtylak (2017) for “Oira-açu-tapuya”; von Martius (1867: 2.277–9) and Wojtylak (2017) for Carapaná-tapuya.

River Basin was confirmed to me by the oldest speaker of the language (Aikhenvald 2003a: 456). The shared linguistic features may reflect language contact in the past.

4. The Upper Xingu Area

The Xingu River is a major southern tributary of the Amazon. Only a small portion of it, about 200km, is easily navigable. Beyond this, innumerable rapids have proved a barrier to invaders for a couple of centuries. The Indian groups living there were able, by and large, to maintain their traditional way of life. In the twentieth century, a few other tribes converged on the region, escaping the “white man’s” takeover of their area. Others were moved to the Xingu by the Brazilian government. In 1961, the Xingu Indigenous Park was declared a “national park,” a kind of sanctuary or a living museum of traditional indigenous cultures. The region contains 17 linguistic groups belonging to four families: Arawak, Tupí, Carib, and Jê, in addition to one isolate (Trumai). Map 8.2 shows the area (within the Brazilian state of Mato Grosso).

The Xingu Indigenous Park is divided into two parts. The southern part includes the headwaters of the Xingu River and is known as Upper Xingu. The Upper Xingu is the heart of the Xingu culture area, and the region of early settlement of most of its inhabitants. The northern part includes the lower reaches of the Xingu River. Those who live there occupy a peripheral position within the area in relation to those of the Upper Xingu (Seki 1999). Table 8.1 lists the languages of the Xingu and their affiliation.¹⁹

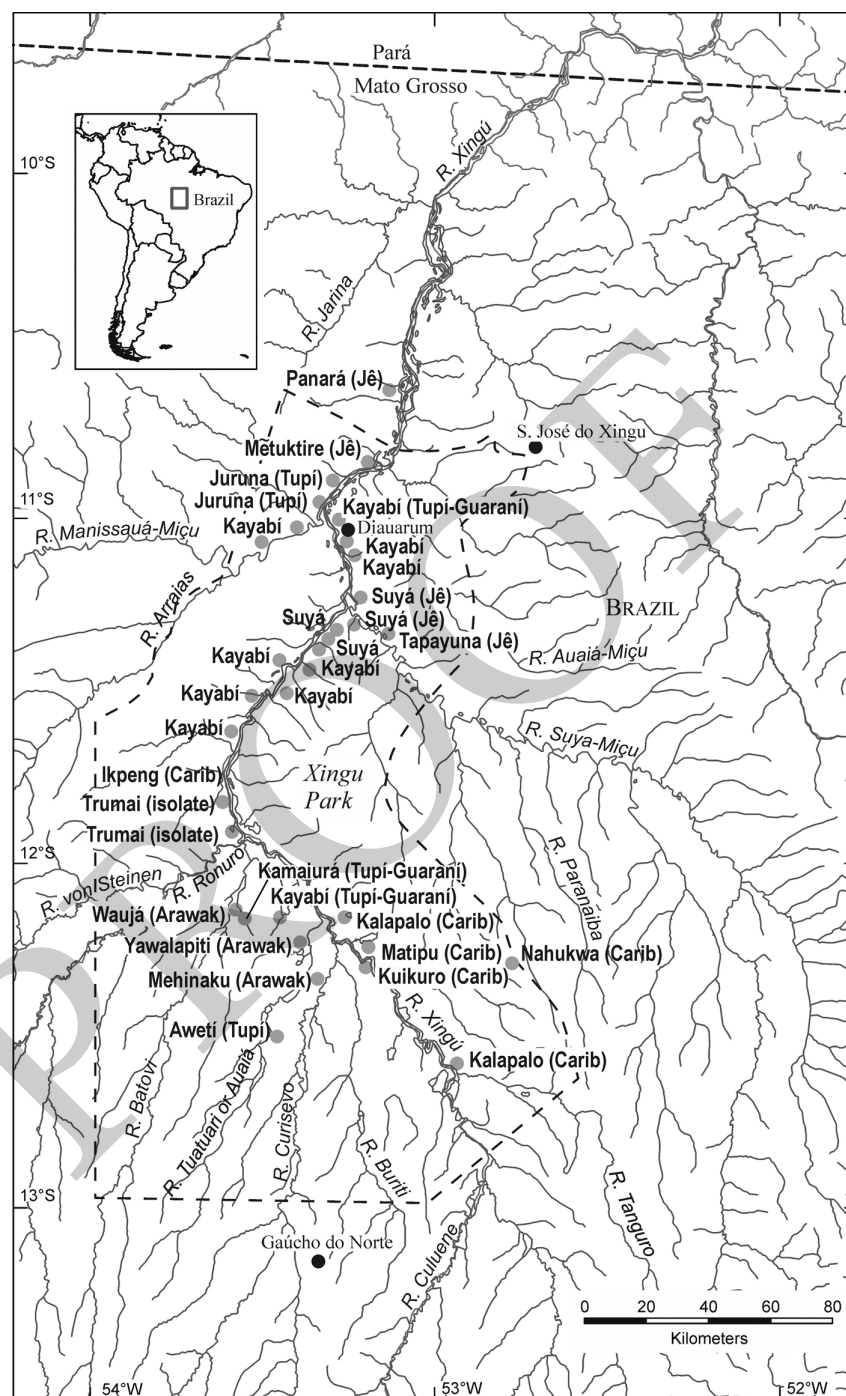
As a result of intertribal warfare, some Xinguan groups ended up living with other groups for protection, and then passed into extinction. The Kustenaú (Arawak) joined two other Arawak-speaking groups, the Waujá and the Mehinaku, while the Anumaniá (Tupí) joined the Awetí (Tupí). Both Kustenaú and Anumaniá are now extinct. According to the oral history of the Kamaiurá, the present-day group was formed by five different units coming together.

The peoples of the Upper Xingu share quite a few cultural and material traits, including village structure, agricultural patterns, and artifacts (Heckenberger 1998, Galvão 1960). Many groups have a special avoidance register used when addressing their in-laws or speaking about them.²⁰

Despite striking similarities between cultural features, rituals, and even special speech styles among the Upper Xingu peoples, the languages show few traces of linguistic diffusion. There are no pan-Xinguan diffusional

¹⁹ See Seki (1999, 2010), Franchetto & Heckenberger (2000a), Franchetto & Heckenberger (2000b), Franchetto (2000, 2010), and references therein on the history of the region.

²⁰ See Basso (2007) on Kalapalo and Mutua Mehinaku; Franchetto (2015: 150–1) on Kuikuro and Mehinaku; Gregor (1977: 284) on Mehinaku; Seki (2000: 327, 395) on Kamaiurá; and Emilienne Ireland (p.c. 2016–18) on Waujá.



Map 8.2: The extant languages of the Xingu Indigenous Park.

Table 8.1: *Extant languages of the Xingu Indigenous Park*

Location		Name of language/group	Affiliation
Upper Xingu (southern part of the Park)	"Traditional" inhabitants	Waujá	Arawak
		Mehinaku	
		Yawalapiti	
		Kuikuro	Carib
		Kalapalo	
		Matipu	
		Nahukwa	
		Kamaiurá	Tupí-Guaraní (Tupí)
		Awetí	Awetí (Tupí)
		Trumai	isolate
Lower Xingu (northern part of the Park)	Peoples adjacent to the Upper Xingu	Juruna	Juruna (Tupí)
		Suyá	Jê
		Me)tuktire (or Txukaramae; originally a section of Kayapó)	
		Kayabí	Tupí-Guaraní (Tupí)
	Peoples transferred to the area	Ikpeng	Carib
		Panará	Jê
		Tapayuna	

traits, in stark contrast to established linguistic areas such as in the Vaupés River Basin (Section 2.1) or elsewhere in the world. The key may lie in the absence of institutionalized multilingualism within the region.

In Ball's (2010: 95) words, "Upper Xinguan ethnolinguistic groups orient to different codes (languages) and individual speaker multilingualism is the exception not the rule in the Upper Xingu." During intertribal meetings and exchanges each group uses their own language. Rather than learning and using each other's languages, the Xinguans use institutionalized non-verbal communication to make themselves understood. Few people know languages other than their own (but many can be considered passive bilinguals).

The earliest settlement of the Upper Xingu area is dated as approximately AD 900–1500 (Heckenberger 1998). The Arawak-speaking peoples are believed to have been the earliest settlers in the region. The Carib-speaking tribes, the Awetí and the Kamaiurá are thought to have started coming in from the seventeenth century onwards. The Trumai are the most recent arrivals. The Upper Xingu culture area must have been established in the second half of the eighteenth, or in the early nineteenth, century (see Heckenberger 1998, 2000).

The relatively shallow time depth of the region may explain the absence of significant linguistic diffusion in the Upper Xingu, and the lack of clear area-defining features. A number of lexical items, many referring to flora and fauna, are shared between Xinguan languages (Seki 1999: 426, 2010: 75–8). Just three traits in Arawak and Carib languages, spoken by the earliest inhabitants of the Upper Xingu, are likely to have resulted from language contact (Seki 1999, 2010: 73–5).

Firstly, many genetically unrelated languages in the Upper Xingu region share the phonological change $p > h$. In Kuikuro p has become h in intervocalic position (Franchetto 1995: 55). In Kamaiurá, proto-Tupí-Guaraní $*pw$ has become hw or h . In Yawalapiti $pi-$, 2SG prefix, becomes $hi-$ if the following root begins with w or y . This is not found in other Tupí-Guaraní or Carib languages. But it is not infrequent in Arawak languages outside the region. P has become h in Pareci (also known as Haliti), the Arawak language which is genetically and geographically closest to Xinguan Arawak, in Enawene-Nawê, spoken in the state of Acre, and in a number of North Arawak languages (e.g., Bahwana, Achagua, and Yavitero; Aikhenvald 1999a). This shared feature could have spread from Arawak.

Secondly, Carib languages in the Upper Xingu have exclusively CV syllables, in contrast to related languages in other regions which also have CVC syllables (Derbyshire 1999). Having CV-only syllables is a pervasive feature of Arawak languages. In all likelihood, this is the source of the syllable pattern in the Xinguan Carib.

And thirdly, the distinction between masculine and feminine genders in cross-referencing markers is a common feature of Arawak languages (Aikhenvald 1999a, 2012a: 302–4). Arawak languages of the Upper Xingu lack grammatical gender. This loss could have occurred as the result of contact with Tupí and Carib languages in the Xingu, none of which has genders.

Traces of individual contacts between Xinguan groups are reflected in shared myths, songs, and ceremonial discourse. The Carib-speaking Kuikuro (Franchetto 1986: 126; Mutua Mehinaku & Franchetto 2015) and the related Kalapalo (Ellen Basso, p.c. 2006) perform ceremonial songs with a strong “Arawak” component. Their language cannot be identified with any of the Arawak languages spoken in the Xingu region at present, and singers are unable to offer a full translation. Within the songs performed by the Kuikuro, some forms resemble Yawalapiti and Waujá, and others appear to contain elements of Mehinaku. These ritual forms suggest a strong tradition of ceremonial interaction and absorption of cultures in the past.

To sum up, the Upper Xingu area is relatively young. The region shows features of a cultural area, but not just yet of a linguistic area. No area-defining traits set the languages of Xingu apart from related languages spoken outside the region. The situation in the Upper Xingu region is reminiscent of the much-discussed case of the Great Plains region of the USA, which is a recognized culture area, but not a linguistic area, due to the lack of sufficient time depth (Mithun 1999: 321, Doug Parks, p.c. 1996).

Currently, a few languages in the Xingu area (including Yawalapiti and Trumai) are severely endangered. Portuguese, the national language of Brazil, is acquiring more and more importance in the region, and contacts with non-Indians are becoming more intense. The impact of current social developments will, in all likelihood, further alter the patterns of cultural and linguistic diffusion.

5. Further Candidates for Linguistic Areas

Shared features between genetically unrelated languages in other regions within Amazonia point towards erstwhile language contact and areal diffusion. The combined basin of the Guaporé and Mamoré rivers, tributaries of the Amazon, spans adjacent regions of Brazil and Bolivia. It is home to over 50 languages, which belong to at least eight different genetic groups: Arawak, Chapacura, Macro-Jê, Nambiquara, Panoan, Tacana, Tupí-Guaraní, and various other branches of the Tupí family, in addition to more than ten isolates. The peoples on the Brazilian side of the Guaporé River share a few cultural features, including slash-and-burn agriculture, relatively small egalitarian societies, and the use of hallucinogenous substances by shamans. People on the Bolivian side practice a different kind of agriculture (“raised field”) and (used to) have stratified societies.

A few typological features appear shared by many of the languages on both sides. Almost all the languages in the region have evidential systems (of varied structure and varied complexity), complex directional markers, and verbal number. Based on these, Crevels & van der Voort (2008) suggest that the Guaporé-Mamoré Basin is a linguistic area. However, the details of the systems show substantial differences, and none can be considered area-defining. For instance, Karo (Ramarama subgroup of Tupí) has a large system of evidentials with more than five terms, while other languages, including Cavineña and other members of the Tacana family, have only one reported evidential. Most languages (with the exception of Mojo and Baure, from the Arawak family) have no classifiers. The existence of INCLUSIVE/EXCLUSIVE distinction in pronouns across the Tupí languages in the region (such as Mekens, of the Tuparí subgroup; Karo, Gavião, and Karitiana) could be due to genetic inheritance, rather than diffusion. Arawak languages (such as Baure) do not have this trait. Many languages are highly synthetic and have complex systems of causatives and applicatives. Each of these general features could be inherited from a proto-language of each family.

At present, there is little evidence of language contacts across the region. The individual contacts between groups appear to be relatively recent. The Brazilian state of Rondônia appears to have been an area of refuge for peoples migrating from other regions. From the seventeenth century onwards, people of the Lower Madeira region migrated south and perhaps drove the existing peoples southwards. The Arawak-speaking groups in Bolivia (including the Baure, the Mojo, and also the Paiconeca) are thought to be later arrivals, the consensus being that the Arawak proto-home is in the Amazonian north (see Aikhenvald 2013 and references therein). The relatively recent migrations may have been sped up by the encroaching invasion of Western colonizers from the northeast, adding to the linguistic complexity of a newly emergent contact area.

The question of whether the Guaporé-Mamoré Basin has ever been an established linguistic area is complicated by further issues. Many

languages, such as Nambiquara, numerous subgroups of Tupí, and Tacana, are not spoken anywhere outside the region. Thus, unlike in the case of Tariana within the Vaupés River Basin area, it is difficult to decide which features were acquired through diffusion and which were inherited. At our present state of knowledge, one can only hypothesize that some of the languages may have been in contact at some time in the past.²¹

We now turn to other possible instances of areal diffusion. Amuesha and Chamicuro (both Arawak), Candoshi and Cholón (both isolates), Jivaroan languages, and Quechua – all spoken along the eastern slopes of the Andes – share a few phonological features, among them consonant clusters and consonant-final syllables. Amuesha, Chamicuro, Candoshi, and some Quechua varieties have retroflex consonants (absent from other Arawak languages). Phonological similarities between these languages not shared with genetic relatives could be due to contact-induced change. However, as Wise (2011: 311) points out, there are hardly any traces of an impact of language contact in the grammar of these languages, nor is there evidence in favor of long-standing areal diffusion. All we can say at present is that many of the languages of the region, including Amuesha, Cholón, and Jivaroan, have been in contact with Quechua (see also Wise 1976, Adelaar 2006 on Quechua substratum in Amuesha, and the use of Quechua as a trade language). Traces of Quechua influence are discernible in Kawapaman languages (Valenzuela 2015), but the evidence in favor of any larger scale areal diffusion, let alone a linguistic area, remains inconclusive.

Languages spoken in the Andean foothills and close to the Andes have a number of features shared with Quechua, an Andean language. Languages closer to the Andes are consistently nominative–accusative, just like Quechua. These include Jivaroan, Zaparoan, Tucanoan, and Witotoan. Traces of Quechua influence are found in numerous languages. For instance, many number words in Urarina, an isolate, are of Quechua origin (Olawsky 2006: 275). In all likelihood, this reflects intensive trade relations with Quechua speakers before the Urarina moved to their present location (Dean 2009: 55–8; Chacon, this volume). Conversely, some varieties of Quechua, including Ecuadorian Quichua, underwent grammatical restructuring under the influence of Amazonian languages (Zúñiga 2015, Urban 2018). Whether or not the Andean foothills ever converged into a linguistic area (rather than having simply had a series of individual contacts) remains an open question.

South of the Amazonian Basin lies the Gran Chaco region. It encompasses the southeastern parts of Bolivia, northern Argentina east of the Andes, and the western area of the Paraguay River Basin in Paraguay (Adelaar 2004: 488). The traditional inhabitants of the region share practices of subsistence

²¹ Muysken et al. (2015) attempted a reappraisal of putative areal features in languages of the Guaporé-Mamoré combined river basin, following a deductive “top-down” approach, which involves checking if features established for other areas will apply to the region. The results are inconclusive.

agriculture, social organization, rituals, music, and cosmology. The languages spoken there belong to several families, including Guaycuruan, Tupí-Guaraní, Mataguyan, Zamucoan, and Lule-Vilela. Many of them share distinctive phonological features: the opposition of voiceless and ejective obstruents, postvelar sounds, and a number of unusual grammatical features, including possessive classifiers and multi-word serial verbs. There is strong evidence in favor of the Gran Chaco as a linguistic area beyond the Amazonian Basin (see the arguments in Comrie et al. 2010 and González 2015; the position of Zamucoan languages within the Gran Chaco is explored by Bertinetto & Ciucci 2012 and Ciucci 2014).

6. Shared Features across Amazonia: Putative Traces of Language Contact

Languages spoken over an extensive geographical area may have never been in direct contact with each other. And yet, they may share occasional features and even forms for other reasons. Languages that have never been in immediate contact with each other may have borrowed the same form, or the same pattern, from some common source, or from different sources (see Tosco 2000 for these and other options).

What makes Amazonian languages a puzzle for historical linguists is a smattering of grammatical and lexical forms shared by unrelated languages that, as far we know, have never been in contact with each other. Similarities between Amazonian languages and shared structural features have led some scholars to suggest that the whole of Amazonia may be considered one linguistic area (Derbyshire & Pullum 1986, Derbyshire 1987, Key 1993). A number of typological properties set Lowland Amazonian languages apart from the languages of the Andes across the adjacent mountain range: Quechua and Aymara. They include number words, nominative–accusative marking of grammatical relations, and the presence of genders and classifiers. Structural similarities between Quechua and Aymara are, in all likelihood, due to long-standing language contact rather than genetic relationship (Adelaar 2004).²²

Unrelated and not even contiguous Amazonian languages share a number of features. Many of them have a “typical Amazonian” five-vowel system, which includes a high central *i* (the other four vowels are *i*, *e*, *a*, and *u/o*). Nominalizations are used as complementation and relativization strategies in many Carib, Arawak, Tupí-Guaraní, Tucanoan, Witotoan, Jivaroan, and other language families across South America, including the Andes

²² The “Amazonian” linguistic type is contrasted to the “Andean” type in Dixon & Aikhenvald (1999a) and Aikhenvald (2012a: 74). A putative division of Amazonian languages along a hypothetical East/West divide (e.g., Birchall 2014) is based on a partial investigation of a limited set of languages; it remains problematic, especially in view of extensive language loss in the eastern areas of the Amazon Basin.

(Overall & Wojtylak 2018, Aikhenvald 2012a: 332–4). These are in addition to shared discourse patterns and traditions of story-telling (see Overall 2019: 169 for further references).

A few grammatical features appear to occur mainly in Amazonian languages. Morphologically marked “sociative” causative, whereby the causer not only causes the action to take place but takes part in it, is overwhelmingly Amazonian, with just a handful of examples from elsewhere (Guillaume & Rose 2010; Aikhenvald 2012a: 240–1). A verbal marker with a frustrative meaning, “in vain,” is found in many Amazonian families and appears to be rare in other parts of the world (Overall 2017; Aikhenvald 2012a: 183–5).

Some features span contiguous regions. Tonal languages cluster in two regions within Amazonia. One lies south of the Amazon River, centering on the Brazilian state of Rondônia, the proposed proto-home of the Tupí family (Aikhenvald 2013). The other one is centered on the Vaupés River Basin and the Caquetá Basin, and further to Northeastern Peru, encompassing East Tucanoan, many Arawak, Puinave, Hup-Yuhup-Dâw, Kakua-Nukak, Bora, numerous Witotoan languages, and Yagua, a Peba-Yagua language (Aikhenvald 2012a: 123–5). Complex classifier systems and serial verb constructions (Aikhenvald 2012a: 303, 323–5, maps 10.1 and 11.1) tend to occur in adjacent unrelated languages. Each of these could be an indicator of past linguistic contacts. The spread of neither of these features is co-extensive with any of the known linguistic areas.

A number of forms are shared across Amazonia. Payne (1990) identified five widespread grammatical forms, including a causative prefix *mV-* and valency-changing affixes of the shape *-ka*. The form **koko* ‘mother’s brother, father-in-law’ can be reconstructed for Proto-Arawá; a similar form, **kuhko* ‘uncle, father-in-law’, was reconstructed for Proto-Arawak. In his pioneering study of indigenous languages of Brazil, von Martius (1867: 1.359–60) mentioned a few similar forms meaning ‘uncle’ in unrelated languages, including Kariri (Macro-Jê) and Macushi (Carib). He grouped them as “Guck” or “Coco” languages. We have no explanation for these similarities.

Further forms shared by genetically unrelated languages include *kanawa* ‘canoe’, found in the Carib and Arawak families, in addition to a number of others (such as Arawá).²³ A number of mythological motives are shared by Amazonian groups, including jaguar shamans, tapir avoidance, and an association between agouti (a large rodent) and the underground magical world (Roe 1982, Urton 1985: 8). Pan-Amazonian features, both linguistic

²³ See Dixon (2004b: 17, 2004a: 13) for Proto-Arawá and Payne (1991: 424) for Proto-Arawak. Other forms such as *kuna* ‘fish poison’ and *uma* ‘piranha’ are discussed in Aikhenvald (2012a: 71); see also Wojtylak (2019: 213) for the shared terms for wooden drums. An attempt at suggesting further putative “Wanderwörter” in Amazonia in Haynie et al. (2014) is to be treated with caution, due to a number of unjustified comparisons, factual errors, and failure to distinguish recent loans from older lexicon (such as *kumana* ‘beans’ borrowed from a lingua franca known as Nheêngatú [or Língua Geral Amazônica, of Tupí-Guaraní origin] into a number of Northern Amazonian languages no earlier than the eighteenth century; see da Cruz 2011 and Rodrigues 1996 on its spread).

and cultural, point towards traces of older and no longer recoverable language interactions, which played a role in shaping the linguistic landscape of Amazonia as a linguistic continent or language region (reminiscent of “pan-African” features described by Heine & Nurse 2008).

7. Conclusions

The long-term history of language interaction in the linguistically highly diverse Amazon Basin has been marred by a large-scale language extinction and obliteration of erstwhile contact patterns. At present, the Vaupés River Basin area is the best-established linguistic area in Lowland Amazonia. Linguistic and cultural features of neighboring languages in the Upper Rio Negro region, and in the basin of neighboring Caquetá and Putumayo, point towards possible areal diffusion in the past. The Upper Xingu region is a well-established cultural area. However, due to its relatively shallow time depth, a linguistic area has not yet been formed. A number of other regions within Amazonia show traces of possible language contact with inconclusive evidence in favor of long-standing areal diffusion. A number of pan-Amazonian features are shared by genetically unrelated, and often geographically remote, languages. These may well reflect traces of linguistic contact which can no longer be recovered.

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