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Areal Diffusion in Northwest Amazonia: The Case of Tariana

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Abstract. The large linguistic area of the Vaupes River region in northwest Amazonia is characterized by obligatory multilingualism based on two principles of strict exogamy: "My brothers are those who share a language with me" and "We don't marry our sisters." Tariana is the only North Arawak language spoken in the Vaupes region. East Tucanoan languages spoken there are closely related and display a significant degree of structural similarity, as well as a strong inhibition against the "language-mixing" of lexical loans. This paper considers areal influences of East Tucanoan on Tariana phonology, grammatical structure, and semantics. It also discusses independent innovations in Tariana, in contrast to other North Arawak languages of the upper Rio Negro region, and language attrition phenomena. This investigation contributes both to the study of North Arawak languages of South America and to our understanding of areal diffusion of structural patterns in a relatively young linguistic area.

1. Multilingualism in northwest Amazonia revisited. The large linguistic area of the Vaupes River region in Brazil and Colombia, characterized by obligatory multilingualism, was first described by Sorensen (1972 [1967], 1985), Jackson (1974), and Grimes (1985). All existing studies were primarily concerned with the Colombian part of this area and with the sociolinguistic interaction among East Tucanoan languages. Here I shall consider recent developments on the Brazilian side of the area, and especially the effects of areal phenomena on Tariana, the only North Arawak language spoken in the Brazilian Vaupes region (see map 1).

This study focuses on the patterns of linguistic convergence, divergence, and areal diffusion that take place in the particular situation of prolonged contact between Tariana and the genetically unrelated East Tucanoan languages. Section 2 gives a brief ethnohistoric and ethnographic introduction to the Brazilian Vaupes and the current linguistic situation there, with special reference to Tariana. The Brazilian Vaupes displays significant differences in degree and patterns of acculturation from the Colombian territory of the Vaupes described by Sorensen and Jackson. One of these differences is that Tariana is not spoken in Colombia, and so the Vaupes linguistic area on the Colombian side does not involve any interaction of genetically unrelated languages. Section 3 is concerned with the definition of a linguistic area



Map 1. Location of Tariana.

(Sprachbund) and a brief characterization of the Vaupes as such. The analysis of areal phenomena in Tariana is given in section 4. Independent innovations and the symptoms of language attrition in Tariana are described in section 5. In the last section some conclusions are drawn as to how the data discussed here apply to the problems of linguistic areas in the New World and the typology of contact change.

2. Linguistic situation and language attitudes in the Brazilian Vaupes.

2.1. Languages spoken. The population of the Brazilian Vaupes region can be divided into the following culturally integrated, but genetically unrelated, linguistic groups:

- speakers of seven languages of the East Tucanoan family: Tucano, Tuyuca, Guanano-Piratapuya, Desano, Karapana, Cubeo (see Grimes 1985, 1988; Huber and Reed 1992);¹
- speakers of the North Arawak language Tariana;² and
- speakers of the three Maku languages Dâw, Hupda, and Yuhup.

The Yanomami, semi-nomadic hunters and gatherers who live in the jungle around the small tributaries of the upper Rio Negro (see map 2; Lizot 1988:490), and who sometimes extend as far westward as the Vaupes region, are not culturally integrated with other peoples of the upper Rio Negro and thus do not form a part of the Vaupes linguistic area. Feared or neglected, they rarely interact with the peoples of the Vaupes. Their status can be compared to that of Gypsies in the Balkans, who, although present in the region, do not participate in linguistic and cultural “exchange.”

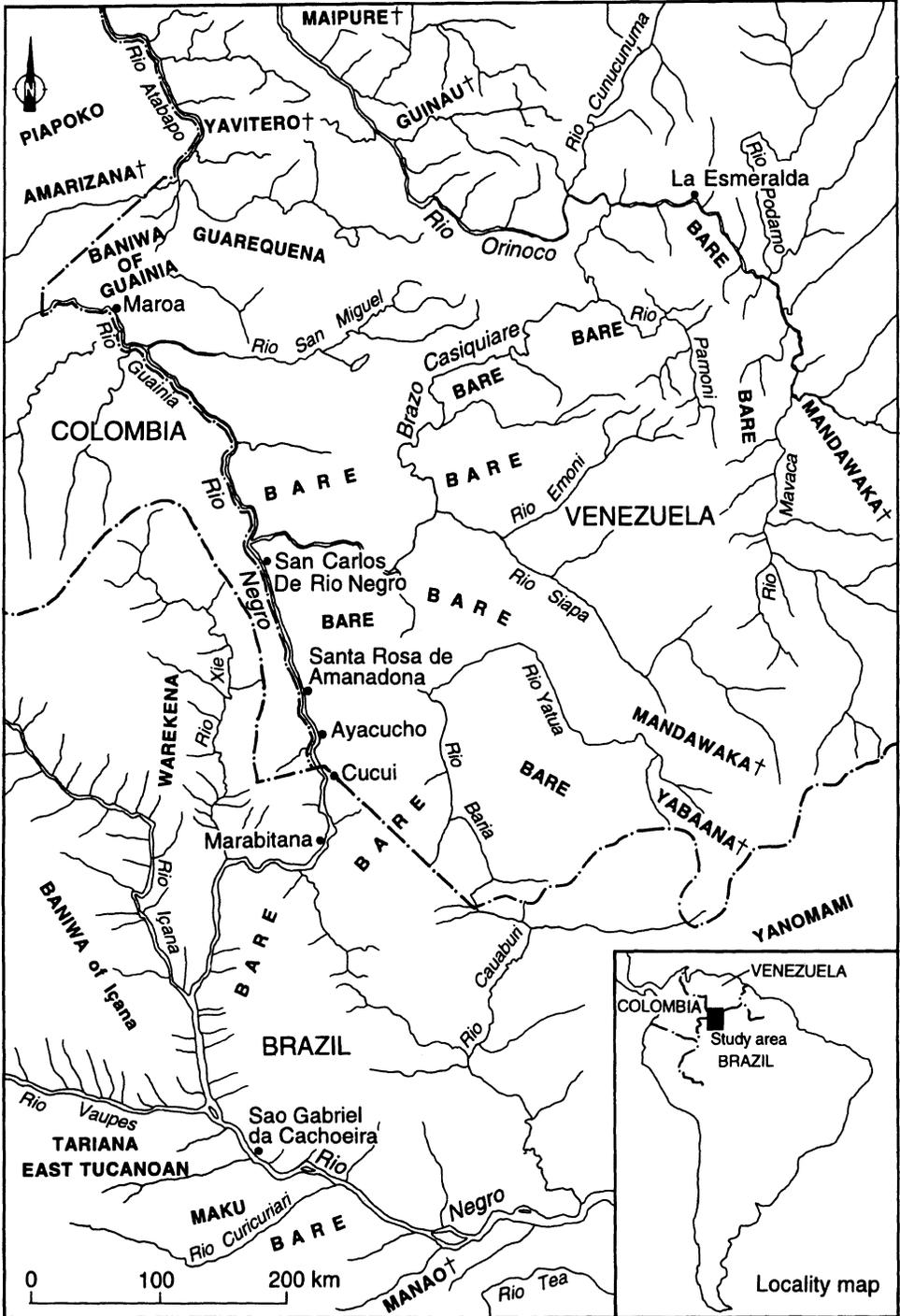
East Tucanoan languages are closely related (see section 3.3), but are not mutually intelligible.

Tariana is genetically related to other North Arawak languages of the region (see map 1), such as Warekena, Bare, and especially Baniwa of Içana, all of which are spoken outside the Vaupes area.³ Tariana also has a number of non-Arawak features that result from its coexistence with East Tucanoan languages in the Vaupes.

Ethnic Tariana comprise more than 1,500 people (Rodrigues 1986). There are approximately 100 adult speakers of the language scattered on the main river (see below, on the difficulties in establishing the exact number of speakers). Tariana is spoken in Santa Rosa (also known as Juquira), Iauarete, Periquitos, and Ji-Ponta (see map 1).⁴

Semi-nomadic Maku (the “untouchables” of the region) display a number of cultural differences from East Tucanoans and Tarianas, such as lack of linguistic exogamy and agriculture. East Tucanoans and Tarianas, who consider them inferior, refer to them as “slaves” (see Martins 1994; Silverwood-Cope 1990 on the slave-master relationship between Maku and Tucano and Arawak peoples). Moreover, the Maku do not intermarry with either East Tucanoans or Tarianas. Despite these differences, however, they share a significant number of linguistic characteristics with other languages of the Vaupes region and hence belong to the same linguistic area.⁵

In the Brazilian Vaupes, Tucano is gradually gaining ground as a regional lingua franca. Table 1, based on Grimes (1988), illustrates the number of people in that area who identify themselves as belonging to East Tucanoan or Tariana groups, in addition to the language that they actually speak.



Map 2. Languages spoken in the region of upper Rio Negro, Brazil.

Table 1. Ethnic Identity and Spoken Languages in the Brazilian Vaupes

	TUCANO	PIRATAPUYA	GUANANO	DESANO	CUBEO	TUYUCA	TARIANA
PEOPLE	4,500	1,232	(1,000)	1,800	3,000	723	1,500
LANGUAGE SPEAKERS	4,500	200	200	150	300	700	ca. 100

Lingua francas spoken in the region are *Língua Geral*, or *Nheengatu*, and *Tucano*. *Língua Geral* is spoken throughout the entire upper Rio Negro region (see Bessa Freire 1983; Taylor 1985; Rodrigues 1986; Moore, Facundes, and de Nascimento Pires 1994). In the Vaupes, only older people understand it. *Língua Geral* is a creolized version of Tupinambá (Tupí-Guaraní family), spread from the east coast of Brazil by white merchants and missionaries. It was the lingua franca of the entire Amazon region from the late seventeenth century to mid-nineteenth century, and its influence can still be seen in a few loanwords in Tariana and other languages of the Vaupes (see section 4.3). Beginning in the early twentieth century, as a result of the language policy of Catholic missionaries and civil authorities,⁶ Tucano gradually replaced it as a lingua franca.

Indo-European languages in the region, represented by Portuguese and Spanish, are also gaining ground as lingua francas, especially among younger people.

2.2. Cultural setting and linguistic attitudes. In the Brazilian Vaupes, East Tucanoan tribes and the Tariana, the only North Arawak tribe, live in several discontinuous areas along the main river and its tributaries. They display great cultural similarity and a complicated network of marital interrelations.

A useful overview of linguistic consciousness among East Tucanoan tribes in the Colombian Vaupes is given by Sorensen (1972 [1967], 1985), and Jackson (1974). Social units important for the analysis of multilingualism in the northwest Amazon include the nuclear family, lineage, sib, tribe, phratry, longhouse group, linguistic group, and exogamous group (Sorensen 1972 [1967]:79). Nuclear families form a lineage, and several lineages form a patrilineal sib. A tribe is defined as a political and ceremonial group that comprises several sibs; it is identifiable by a distinct language. Each tribe is aligned with one of five phratries, each of which is an exogamous group of sibs that intermarry with the other phratries of the area.

Since the establishment of Salesian missions in the Brazilian Vaupes in 1925, longhouses have been ousted by villages with individual houses for each nuclear family (Anonymous 1965). Otherwise, for the most part, the tradi-

tional principles remain the same (with the exception of the changes due to acculturation mentioned below).

Multilingualism used to be, and to a great extent still is, a cultural norm in the entire Vaupes. Marriage is exogamous, and there are strict marriage rules governed by language identity. Marrying someone who belongs to the same language group is considered incestuous. Jackson reports that the Bara have the following attitudes about marrying speakers of the same language: "My brothers are those who share a language with me" and "We don't marry our sisters" (1974:62). Consequently, the language, acquired through a patrilineal principle of descent, is a badge of identity, and an Indian always identifies with both his father's tribe and language.

The primary social and linguistic unit is a language aggregate identified by one's father's language. The settlements—longhouses or villages—are multilingual because of exogamous marriage rules. Every individual usually knows from three to ten other languages of the region, including his mother's language, which would most often be his wife's language, as well as Portuguese or Spanish. Since language identity is a badge of ethnic identity, languages—even the closest ones—are kept strictly separate (see Sorensen 1972 [1967]:82). This separation creates a very strong impediment to lexical loans, in contrast to other multilingual situations, such as that found in the village of Kupwar (Gumperz and Wilson 1971:161–62) or in multilingual Jewish communities (see U. Weinreich 1963; M. Weinreich 1980).

Hypothetically, all possible combinations of languages could be encountered in a multilingual village or longhouse. This, however, is not the case, due to the operation of phratic principles and strong hierarchical relations between sibs and tribes. On the contrary, tribes such as the Guanano and Piratapuya do not intermarry because they are considered "brothers."⁷ The same applies to the Bara and Tucano (see Jackson 1974:56). According to my Tariana teachers, Desanos are "younger brothers" of Tarianas and, for that reason, they do not intermarry (see also Brüzzi 1977). This hierarchy of tribes, in which a "younger brother" is an equivalent of a "slave" (see C. Hugh-Jones 1979), may be explained historically by the fact that the Desanos are descendants of a "Tucanocized" Maku tribe (Koch-Grünberg 1906). Thus, theoretically one does not find longhouses, or settlements, with Bara and Tucano, Guanano and Piratapuya, or Tariana and Desano as father-languages. Nonetheless, this does not exclude actual knowledge of these languages by the people, though they may not admit it to an outsider.⁸

These principles result in great difficulties in establishing the number of speakers for individual languages in the Vaupes region. Only those whose father speaks a certain language would identify themselves as speakers of it. As a result, however well an Indian speaks his mother's language (which is, preferably, his wife's language as well), he will usually not acknowledge it, or only do so very reluctantly. Moreover, however well his wife and mother speak

his language, they will not be acknowledged as actual speakers. For instance, during fieldwork sessions with Tariana speakers, the younger people often had to recur to the help of their mother, a Piratapuya, who would remember the old words "better." But, however profound her knowledge of Tariana, she would never be included among Tariana speakers.

The general "rule" of codeswitching is that one is supposed to speak one's father's language to one's father, one's mother's language to one's mother, and, preferably, the interlocutor's primary (i.e., father's) language, if possible. Otherwise, language-switching is considered inappropriate, unless it is meant to be a joke (accompanied by roars of laughter). In narratives, spirits, animals, and children often speak another language. For example, in a number of Tariana stories and myths, spirits, animals, and children speak Guanano or Tucano in direct speech (cf. Hinton 1994; Valentine 1994 on different manifestations of codeswitching). The general disintegration of traditional rules, however, has entailed changes in codeswitching principles. Very often younger people whose fathers are not Tucano will now speak Tucano, a local lingua franca, among themselves and to their children; such is the case with the Tarianas. This trend seems to indicate a gradual loss of one's father language as a badge of identity (see section 2.4).

It should be stressed that the unusual linguistic diversity is accompanied by a lesser degree of cultural diversity. Cultural homogeneity is corroborated by (1) shared means of subsistence, food, and ways of life; and (2) shared stories and rites, and traditional social structure, as well as a minimal division of "labor" between tribes (see Galvão 1979 for the differences in pottery and basket-weaving techniques between Tucano- and Arawak-speaking groups). There are a number of shared myths and stories (e.g., stories about the cunning turtle, the evil spirit's son who turned into a deer, etc.). Nonetheless, each group, and apparently every subtribe, does have their own versions of origin and myths.

As will be shown in section 4 below, there is a large degree of grammatical and phonological convergence among the indigenous languages of the Vaupes. The impact of these convergence phenomena are especially instructive in the case of Tariana, since they are the discernible result of "foreign" influence.

2.3. Historical evidence. Both historical and traditional evidence show that neither the Tucano nor the Tariana are the autochthonous population of the Vaupes. According to Nimuendajú (1982), the original inhabitants of the Vaupes area were Maku tribes, and East Tucanoan tribes invaded the area from the east. The Tarianas are also more recent arrivals. They arrived on the Vaupes from the tributaries of the Içana River, most likely from the Aiari around the end of the sixteenth century (Koch-Grünberg 1911; Brüzzi 1977; Nimuendajú 1982). This origin of the Tarianas is reflected in their myths, according to which all of them emerged from a "hole" at the waterfall of Apui,

on the Aiari River. Numerous stories about the wars between the Tarianas and Guananos, and the Tarianas and Desanos, provide rich ethnohistorical evidence of the Tarianas' invasion of the Vaupes (see Biocca 1965:253-61; Brüzzi 1977). The Desanos, as the inhabitants of the main rivers, were among the first to have endured the invasion of the Tarianas. I was told by my Tariana teachers that, as the result of the Desanos' defeat, they became "younger brothers" of the Tarianas, and this is why Tarianas do not marry them.

The following historical scenario of the linguistic situation in the Vaupes can be reconstructed for the past five hundred years. Prior to the sixteenth century, East Tucanoan tribes moved from the east into the Vaupes area, which was previously inhabited by Maku tribes, and established dominance over them. Around the beginning of the seventeenth century, the Tarianas, splitting from the Baniwa of Içana, moved from the tributaries of the Içana River to the Vaupes region, in which East Tucanoan tribes were already established. This event marked the beginning of areal diffusion from East Tucanoan to Tariana. The areal diffusion between Maku and East Tucanoan peoples, however, must have been much older (see section 3.2). Thereafter, between 1750 and 1780, the first contacts with the Portuguese took place, initiating the spread of *Língua Geral* as a lingua franca. Then, at the beginning of the twentieth century, Tucano started to gain ground as a lingua franca of the area, with some Tariana settlements beginning to use Tucano primarily (see Koch-Grünberg 1911). This tendency increased with the establishment of regular Salesian missions in the Vaupes in 1925, and resulted in the growing endangerment of indigenous languages other than Tucano and the increasing obsolescence of *Língua Geral* in the Vaupes region.

The primary consequence of the spread of Tucano in the Brazilian Vaupes is the gradual undermining of language-tribe identity. Language is gradually ceasing to be an emblem of tribal identity, and the majority of languages other than Tucano have become endangered. The discrepancy between the number of those who belong to a tribe and those who actually speak the language (see table 1) is particularly impressive in the case of Tariana. As a result, the spread of Tucano is causing the gradual disappearance of one of the most peculiar multilingual areas of the world and of the areal phenomena associated with it.

2.4. Current linguistic situation. The current linguistic situation in the Vaupes is characterized by the reduction of multilingualism and a change in codeswitching rules, which can be summarized as follows:

- Since schooling is in Spanish and Portuguese, the domain of these languages, and proficiency in them, increases.
- The introduction of some schooling in Tucano has increased the prestige of Tucano and the emphasis upon learning it.
- Traditional "taboos" are becoming weaker; one can occasionally find "pro-

hibited" marriages, e.g., Guanano with Piratapuya, Tariana with Desano; the commentary is that "the old people do not approve of this."

- The prestige of Tucano as a lingua franca, the spread of "civilization" in the form of one people-one language (presumably, Tucano), and the importance of some East Tucanoan leaders (due to the manner in which indigenous organizations operate in the context of Brazilian society) lead to a gradual obsolescence of Tariana and of East Tucanoan languages other than Tucano.

Consequently, some parents, neither of whom is Tucano, only speak Tucano to their children, trying in this manner to make them "more civilized." Such is the case of my Tariana teachers. Some people, more concerned about keeping their own language, speak their father's language (e.g., Piratapuya, Desano) to their children, even though the children often answer in Tucano (see also Grimes 1985). Obsolescence of languages other than Tucano is also shown in the results of a language census by Renault-Lescure (1989).

The Brazilian Vaupes area can still be characterized as a culturally homogenous one in which multilingualism is a norm. This cultural norm, however, is endangered, since it is in a rather advanced state of obsolescence, accompanied by language attrition. The situation has especially serious consequences for Tariana, accelerating the processes of contraction and obsolescence of the only North Arawak language spoken in the Vaupes area. I shall return to this point in section 5.

3. Properties of the Vaupes linguistic area and diffusion patterns.

3.1. Definition of a linguistic area. Sherzer (1973:760) provides the following definition of a linguistic area, which is especially relevant for languages of the New World:

A LINGUISTIC AREA is defined here as an area in which SEVERAL linguistic traits are shared by the languages of the area and [in which] furthermore, there is evidence (linguistic and non-linguistic) that contact between speakers of the languages contributed to the spread and/or retention of these traits and thereby to a certain degree of linguistic uniformity within the area. It is important to remember that languages which are unrelated or distantly related may very well and probably do disagree with regard to many traits and yet still [be] in the same linguistic area according to the above definition, since they share SEVERAL traits (which one might want to call diagnostic traits). [Sherzer 1973:760]

The primary problem, then, is how to locate the diagnostic traits, especially in cases when at least some shared features, or similarities of contiguous languages, can be explained by accident, universals, genetic factors (in particular, if the languages are related), etc. Apparently, as also shown in Campbell, Kaufman, and Smith-Stark (1986:535), not all shared features have the

same "weight," since "highly 'marked' exotic, or unique shared traits weigh more than does material that is more easily developed independently, or found widely in other languages." Since "meaningful linguistic areas are the historical product of linguistic diffusion, the stronger linguistic areas are those whose shared traits can be shown to be diffused—and cannot be ascribed to a common ancestor, to chance, or to universals" (Campbell, Kaufman, and Smith-Stark 1986:536).

In the case of genetically related languages, these considerations show that it is definitely more difficult to establish whether the existing similarities are caused by common linguistic origin or by diffusion, especially if they are sufficiently close. The problems with establishing genetically inherited versus diffusional features in American Indian languages north of Mexico have been analyzed in Sherzer (1976), as well as in Bright and Sherzer (1976); for Australia, problems of this kind were analyzed by Dixon (1980:238–51). In these circumstances, a very elaborate reconstruction of individual subgroupings is needed, as is also the case with Indo-European languages in the Balkan linguistic area. The rather precarious state of historical linguistics in South America (see Kaufman 1990 for an overview) presents real problems for discovering areal features and diffusional patterns there. The basic difficulties associated with studying areal features in the New World have been pointed out by Thomason and Kaufman (1988:97–98, 113).

It is also difficult to make a decision concerning the areal features among languages that display typological similarities.⁹ For instance, it is well known that most Lowland Amazonian languages have noun classes and classifiers, and if one is to prove that a particular subregion of this area is a linguistic area, one has to be extremely cautious in ascribing properties of noun class and classifier systems to areal diffusion. The Lowland Amazonian languages are especially problematic in this respect. There are many indications that all Lowland Amazonian languages constitute, to a certain extent, a *linguistic area* (cf. Doris Payne, ed. 1990), since they share a number of structural features. These structural features are, however, unevenly distributed across languages. They include: the order possessor–possessed in possessive and genitive constructions; unusual ergative patterns in the marking of grammatical relations; complicated systems of classifiers and noun classification; and being basically head-marking, with rich verbal morphology (cf. Doris Payne 1990; Derbyshire 1987). A number of shared morphemes are shown in David Payne (1990), e.g., negative *ma*, *na*, oblique case *-ri*, *-li*, or *-ne* (all shared by Tucano, Tariana, and Baniwa of Içana). To proceed successfully with the analysis of areal diffusion patterns, a very careful analysis of the grammars of individual languages and subgroups is needed.

A typical danger for the student of languages in contact also comes from possible "oversimplification" of linguistic processes explained in terms of dichotomies, such as *convergence* and *divergence* (see Dorian 1993). It is al-

ways easy to be misled by surface similarities between adjacent languages and fall into the trap of a “tempting but overly simple dichotomy” (Dorian 1993: 152).

3.2. The Vaupes as a linguistic area. The Vaupes (for some useful comments, see Brüzzi 1967, 1977) is a linguistic area with multilateral multilingualism, characterized by linguistic diversity and a lack of cultural diversity. There is an emerging asymmetrical dominance of Tucano as a lingua franca that is successfully trying to oust other languages. As mentioned above, the languages spoken in that region belong to three genetically unrelated families—North Arawak, East Tucanoan, and Maku—and the speakers do not accept language-mixing. The result is a greater degree of *indirect diffusion* (in terms of Heath 1978) than of direct borrowing. The multilingualism is very strictly organized on the basis of who speaks which language to whom.

The idea that the Vaupes forms a linguistic area was first suggested by Sorensen, with reference to the Colombian side, where only East Tucanoan languages are spoken. He pointed out the existence of a “bundle” of morpho-syntactical isoglosses that constitute an “Eastern Tucanoan type” (Sorensen 1972 [1967]:82–83). But whether this East Tucanoan type is the result of areal diffusion patterns or of a common genetic origin remains a problem that is beyond the scope of the present paper. The solution to this problem will involve a full reconstruction of Proto-East Tucanoan and its comparison with Proto-West Tucanoan and Proto-Tucanoan.

The important difference between the Brazilian Vaupes and the Colombian Vaupes, from the point of view of areal diffusion phenomena, is the fact that a non-East Tucanoan language, Tariana, is still spoken in the Brazilian portion. Thus, the East Tucanoan-like features in Tariana (and also North Arawak-like features in East Tucanoan) will enable us to establish diffusional patterns in the area. Of course, the spread of a certain feature, or of a certain bundle of features, from East Tucanoan to Tariana does not mean that those features have also been diffused from one East Tucanoan language to another, and that they definitely do not belong to a Proto-East Tucanoan heritage. The analysis of this point is also beyond the scope of this paper.

It is interesting to compare the possible areal diffusion patterns that the Vaupes Maku languages (Dâw, Hupda, Yuhup) have acquired from East Tucanoan. Tucanoan-Maku contact appears to be much older than that between East Tucanoan and Tariana. One would ordinarily expect to find unilateral diffusion patterns from East Tucanoan in Maku, since a fair proportion of Maku know at least one or more East Tucanoan languages, but East Tucanoan peoples seldom have competence in a Maku language. I have been able to establish a number of patterns present in the Maku languages spoken in the Vaupes and upper Rio Negro regions, but absent from Nadëb, a Maku language spoken in the middle Rio Negro area (based on data in Weir 1984, 1990;

Martins 1994). These patterns, which can be attributed to East Tucanoan influence, include pitch accent, and nasalization as a feature of word prosody; case marking connected with topicality; verb compounding that results in the formation of aspectual and modal morphemes; and a wide use of classifiers.

Materials available on Maku languages spoken in the Vaupes and upper Rio Negro areas are not extensive. Nonetheless, they reveal that areal diffusion is rather superficial (compared with Tariana-East Tucanoan interaction). This situation, however, is what would be expected, since the Maku are accorded an inferior social status and are not fully integrated into the multilingual socio-cultural community. Needless to say, further work is needed to determine possible areal diffusion features in the Maku languages spoken in Colombia (i.e., Bara, Puinave, Kakua, and Nukak).

Thomason and Kaufman (1988:96) point out that a long-term multilateral Sprachbund seems to promote gradual isomorphism in all aspects of language structure, except the phonological shape of morphemes. The famous example of several languages spoken in the same linguistic area having the same surface structure comes from the Indo-Aryan and Kannada languages of Kupwar (Gumpertz and Wilson 1971). In the case of numerous multilateral linguistic areas, the best known is the Balkan area (Thomason and Kaufman 1988:97), where the direction of diffusion is easily established.

Unfortunately, the direction of diffusion is not as easily established in the Vaupes region. There are a number of characteristics of the Vaupes that must be borne in mind when analyzing it as a linguistic area. First, the historical coexistence of various East Tucanoan languages and only one North Arawak language provoked diffusion patterns that are primarily unilateral—from East Tucanoan to Tariana (with a few exceptions; see note 16). Second, there is a recent tendency of Tucano to dominate the other languages, thereby destroying multilingualism in the community. Third, the regional significance of language identity and language-people/tribe relations has drastically limited the extent of lexical borrowing. And, lastly, certain phenomena discernible as evidence of language obsolescence must be considered in any analysis of areal diffusion patterns and structural convergence in the languages of the region.

In analyzing areal diffusion and structural convergence in the Vaupes, I have employed my own field data on other North Arawak languages of the region (Baniwa of Içana, Warekena of Xie, and Bare), as well as evidence from both Proto-Arawak and internal reconstructions (see Payne 1991; Aikhenvald 1994a, 1994b, 1995a, forthcoming b, forthcoming c, in preparation). In addition, I have utilized a number of descriptions of East Tucanoan languages (not all of equal quality), together with my own field data. I have also made use of some Proto-Tucanoan reconstructions, as well as descriptions of both East and West Tucanoan languages (the latter of which do not participate in the Brazilian Vaupes linguistic area), including data on West Tucanoan languages and Proto-West Tucanoan.

The analysis of areal and inherited features in Tariana requires a fair amount of internal reconstruction, as well as synchronic comparison with both Baniwa of Içana and East Tucanoan languages. A comparison of Tariana with other nearby North Arawak languages will be extremely useful, especially in determining which properties are shared by Tariana and East Tucanoan languages, and which are shared by other North Arawak languages but absent from Tariana. Some phenomena, of course, have to be ascribed to specific innovations in each case.

The conclusions drawn from this analysis will prove useful in the study of New World areal phenomena, especially under the extremely “exotic” conditions of obligatory multilingualism in the Vaupes, and in determining what kinds of phenomena are more likely to spread among genetically unrelated languages.

3.3. Properties of East Tucanoan languages spoken in the Vaupes. As will be shown below, there is a high degree of grammatical and phonological convergence between Tariana and other languages of the area. Before analyzing the data of Tariana, it is necessary to characterize briefly the most typical properties of East Tucanoan languages.

East Tucanoan languages are “a little farther apart” than Romance or Scandinavian languages are from each other (see Sorensen 1972 [1967]:82) and display different degrees of closeness. The majority of the languages are not mutually intelligible; but even if they were, speakers take great care to keep them apart. Utilizing Sorensen’s (1972 [1967]:82–83) and my own data, I enumerate some properties shared by all East Tucanoan languages that definitely contribute to a structural isomorphism between them, and that enable me, and other specialists, to affirm the existence of an “Eastern Tucanoan type” (Sorensen 1972 [1967]:82; Brüzzi 1977). A brief comparison of them with West Tucanoan languages shows that it is too early to make any firm decisions as to which features are to be explained by common genetic origin and which are due to areal diffusion. Here Tariana data, some of which are presented in section 4, will be crucial in determining what features actually diffused from East Tucanoan to the genetically unrelated late invader, Tariana.

All the indigenous people of the upper Rio Negro area have very strong feelings about the “mixing” of languages. Since language “mixing” is viewed in terms of lexical loans (and not grammatical constructions or morphemes), that explains why there are so few loanwords from East Tucanoan languages, or even Portuguese, in Tariana. Some speakers of Tariana occasionally do not remember a word in their language and may replace it with a Tucano word, especially when no other speakers of the language are around. This actually happened with a thirty-eight-year-old Tariana speaker, who could not remember the Tariana word for armadillo (*salu*) and replaced it with the Tucano

word (*miñe*). When I checked the story with other speakers during my second field trip, they roared with laughter: "This is not our language!" The speaker's reaction was to claim that it was not he who had told that story, but that it must have been someone from Periquitos, where they are "notorious for mixing up their language with Tucano."

East Tucanoan languages have the following common properties:

- They share a phonemic system of twelve consonants and six vowels, each with a nasal counterpart (see appendix). Guanano has three aspirated stops and a sibilant *tʃ*, absent in other East Tucanoan languages. According to Salser (1971), Cubeo has a labio-dental fricative *v* that is absent in other East Tucanoan languages.
- Nasalization is a suprasegmental feature that spreads across the phonological word.
- All have pitch accent.
- There is a phonological process $y > \tilde{n}$ in the context of a nasal vowel; some languages (e.g., Tucano and Guanano) have [ɲ] as an allophone of *r*, and some (e.g., Piratapuya) have [n] as an allophone of *d* before nasal vowels.
- They are basically head-marking, with elements of dependent-marking, as well as agglutinating and suffixing.
- All distinguish between alienable and inalienable possession. Kinship terms and body parts are inalienably possessed, and possession is marked by simple juxtaposition of items, the order being possessor-possessed. The possessive marker *ya* is used for alienably possessed items and combines with a genitive classifier (see example (1) below). In some languages (e.g., Tucano, but not Carapana) *ya* inflects for number.
- All have a complicated system of concordial, genitive, and verb-incorporated classifiers (used only with relativized verbs), based on an animate versus inanimate distinction. Inanimate classifiers, which are optional, are based on semantic oppositions of shape, form, structure, function, etc. There is also a large number of "repeating" classifiers among them, which combine derivational and inflectional (i.e., agreement-marking) functions.
- Demonstratives divide into an animate type that does not take classifiers and an inanimate type that (optionally) does. Gender agreement is limited to subject-verb agreement. Three genders are usually distinguished in third person singular: feminine, masculine, and inanimate. The last is also used as an impersonal pronoun. Some languages (e.g., Tucano) do not have an impersonal pronoun.
- They have a complicated system of plural marking, as well as plural agreement both for nouns and adjectives. Relative verb forms are inflected for plural. Numerals from 'four' upward require plural agreement on the head noun.
- They display a peculiar system of nonsubject case marking that is obligatory for personal pronouns and proper names, and is otherwise dependent on the topicality and definiteness of a nonsubject constituent (case marker *-re*).

Moreover, there is usually one locative case marker (e.g., Tucano, Guanano, and Piratapuya *-pi*; Barasano *-hi*), which can cooccur with the nonsubject topical case morpheme.

- They have complicated systems of non-indicative moods and evidentials.
- They “share a preference for a series of clauses in parataxis with a strong avoidance of hypotaxis; the same preferred (and not rigidly fixed) word order prevails (subject-object-verb); the same procedure is followed for developing a discourse topic, the sentence being prolonged by clauses in parataxis so as to provide more and more specificity to an original proposition stated in a main, and, usually first, clause; listeners show the same pattern of response, attentively, politely, or disinterestedly repeating the last verb of the speaker’s sentence; etc.” (Sorensen 1972 [1967]:83).
- They display similar discourse techniques (e.g., a summarizing phrase ‘so he/she did’).
- Independent personal pronouns are widely used in discourse. There are many more transitive clauses with two full NPs than, for instance, in such languages as Baniwa of Içana or Warekena of Xie. Discourse, however, is highly elliptical, since head nouns are most often omitted, and classifiers or modifiers or possessive markers are used anaphorically.

Tariana also offers an extremely interesting example of the interaction of areal features (shared with East Tucanoan languages) and genetic features (shared with closely related, neighboring North Arawak languages). Among the North Arawak languages of the upper Rio Negro region, Baniwa of Içana and Tariana share about eighty percent of vocabulary, and mutual understanding (at least, on a rather simple level) is possible. Their grammatical structures are, however, different.

One should not assume that all East Tucanoan languages share the same grammar, since structural isomorphism between them is not complete. For instance, the possessive marker *ya* inflects for number in Tucano, but not in Carapana (Metzger 1981). Tucano does not have an impersonal pronoun, present in Piratapuya, Guanano, and Carapana. The distribution of items among noun classes shows some significant differences—a complete analysis of which, however, is beyond the scope of this paper.

Areal features in Tariana can be established on the basis of its isomorphism with East Tucanoan languages and its divergence from Baniwa of Içana and other North Arawak languages and cannot be treated as independent innovations. The methodological problems that arise with the analysis of areal convergence patterns in Tariana have been considered above. The symptoms of language attrition in Tariana, along with its innovations, will be discussed in section 5.

4. Areal phenomena in Tariana. Tariana retains all primary Arawak grammatical categories, together with a considerable percentage of their

markers, as well as the Arawak prefixing-suffixing structure and its elements of fusion. Patterns that bear an East Tucanoan influence will be considered here.

4.1. Phonology. Tariana has a number of phonological characteristics that are shared with East Tucanoan languages, but not with genetically related North Arawak languages of the upper Rio Negro (see appendix, for the phonological systems of Tariana, Baniwa of Içana, and East Tucanoan languages). These characteristics, which can be explained through areal diffusion from East Tucanoan languages to Tariana, are given below.

4.1.1. In Tariana, inherited phonemes that do not occur in East Tucanoan—namely, aspirated stops and an aspirated glide—have a reduced functional load compared to its other phonemes and to the same phonemes in other North Arawak languages (cf. Taylor 1990 and Aikhenvald forthcoming d for Baniwa of Içana; Aikhenvald 1995a for Bare). These phonemes also tend to be in free variation with non-aspirated stops and glides. Moreover, there is a tendency to use one sibilant (*s*) instead of two (*s* and *ʃ*, as is typical for North Arawak languages) and to use *s* instead of *ʃ* (absent from Tucano) almost everywhere. Vowel length, which does not occur in East Tucanoan, also has a low functional load, and there is a significant amount of variation between long and short vowels (e.g., Tariana *u:ni*, *uni* ‘water’, Baniwa of Içana *u:ni*).¹⁰ As is typical for language contact situations (see Press [1995:63] for similar phenomena in Breton), Tariana is currently losing phonemes that are not found in East Tucanoan languages.

4.1.2. As in East Tucanoan, nasalization is a word-prosodic feature that does not occur in North Arawak languages (see Aikhenvald forthcoming d).

4.1.3. Two phonemes with low functional load in Tariana are attested in East Tucanoan languages, but are absent from North Arawak. The phoneme *i* appears in two morphemes: *-pi* ‘augmentative’ and *ihmeni* ‘to moan’; and *o* occurs, for example, in a feminine marker employed with kinship terms: *-Co*, Baniwa of Içana *-Cu-* (cf. Tucano *-Co*).

4.1.4. Syllable patterns in Tariana are *CV*, *V*, *(C)Vh*, which alternate with *(C)hV*. Unlike North Arawak languages of the upper Rio Negro, *h* in an unstressed word-initial or morpheme-initial syllable can occupy a postvocalic position, thus creating *VC*-like syllables, e.g., *ehkuápi*, *hekuápi* ‘day’ (cf. Baniwa of Içana *hekwápi* ‘day’). There are several cases in which syllables with the form *CVh* occur word-medially, independent of the stress pattern, in slow to normal register. In such cases, the onset of the following syllable is a voiceless stop, *t* or *k*, e.g., *-nihta* ‘to think, reason’, *-buhta* ‘conditional’,

maratahka ‘a kind of wave’, and *karahta* ‘lung’. Here, the *h*, however, disappears in rapid speech, e.g., *marataka* ‘a kind of wave’, *-buta* ‘conditional’, etc. All these words have a North Arawak origin. The occurrence of such syllables in Tariana resembles *CVh* syllables in Tucano. Note that in East Tucanoan languages, *CVh* and *CV?* are the only instances of consonantal coda.

4.1.5. Tariana has several phonological processes, not found elsewhere in North Arawak, that are characteristic of East Tucanoan. They include the following:

- *y* > *ñ* contiguous to nasal vowels.¹¹
- *y* > *dy* word-initially, e.g., Tariana *yuru* ‘a kind of mosquito’ is realized as *dyuru* in rapid speech.
- *d* > *r* contiguous to a front vowel (optional), e.g., Tariana *-pirena*, *-pidena* ‘discourse marking particle’.

The fact that these phonological processes are found in other South American languages, as well as other languages of the world, does not argue against their areal character in Tariana, since they are absent from other North Arawak languages. The same holds true for nasalization as a word-prosodic property (see section 4.1.2 above) and glottal stop (see section 4.1.6 below).

4.1.6. Glottal stop, present in all the East Tucanoan languages and absent from North Arawak languages, appears sporadically in Tariana word-finally.

4.1.7. Pitch accent and intonation patterns in Tariana display striking similarities to those in Tucano, hence the “Tucanoan” accent in Tariana.

4.2. Grammatical structure. As mentioned earlier, East Tucanoan languages are typologically head-marking, with elements of dependent-marking, as well as agglutinating and suffixing. Likewise, North Arawak languages are head-marking and agglutinating, but also contain more elements of fusion than East Tucanoan languages do. They also are suffixing, with few (as many as ten) prefixes, and their words usually have two prefix positions. Accordingly, Tariana is basically head-marking, with a few elements of dependent-marking, and one prefix position.

An example of the structural isomorphism between East Tucanoan languages and Tariana is given in (1a)–(1c) below. Here the same morpheme-by-morpheme gloss applies to the East Tucanoan languages (Tucano and Desano) and Tariana. In contrast, example (2) from Baniwa of Içana, which has lexemes cognate with Tariana, requires a different morphemic analysis. All, however, have the same English translation.

- (1a) *ha-panisi* *inaru-ya-panisi* (Tariana)
 DEM:INAN-house woman-POSS-HOUSE
- (1b) *ati-wi'i* *numio-ya-wi'i* (Tucano)
 DEM:INAN-house woman-POSS-HOUSE
- (1c) *si-wii* *numino-ya-wii* (Desano)
 DEM:INAN-house woman-POSS-HOUSE
 'This is a woman's house.' (lit., 'This house is woman's.')
- (2) *h̄jehē pan̄ti inaru i-dza-dapana* (Baniwa of Içana)
 DEM+NF house woman INDF-POSS-CL:HAB
 'This is a woman's house.' (lit., 'This house is woman's.')

Examples of the influence of East Tucanoan patterns on Tariana morphology and syntax are given below.

4.2.1. Nominal morphology.

4.2.1.1. Alienable and inalienable possession. North Arawak languages mark both alienable and inalienable possession. Inalienably possessed nouns include all kinship nouns and body parts, as well as a few other items, e.g., 'house' and deverbal nominalizations. Inalienable possession is marked with the help of possessive prefixes, as in example (3) from Baniwa of Içana. Alienable possessed nouns have a special possessive suffix, *-ni*, as shown in (4). This suffix sometimes operates in a similar fashion to a *relational classifier* (see Aikhenvald 1994a for details).

- (3) *hnadua* < *nu-ha-dua* (Baniwa of Içana)
 1SG-parent-FEM
 'my mother'
- (4) *nu-pieta-ni* (Baniwa of Içana)
 1SG-hammock-POSS
 'my hammock'

In Tariana, inalienably possessed nouns are restricted to body parts and to fewer kinship nouns than in other North Arawak languages. Inalienable possession is marked by possessive prefixes, as in (5a), whereas alienable possession is marked by juxtaposition, as in (5b), similar to Tucano, as illustrated by (6).

- (5a) *nu-kapi* (Tariana)
 1SG-hand
 'my hand'

(5b) *nuha ha-du* (Tariana)
 I parent-FEM
 'my mother'

(6) *yi'i pa-co* (Tucano)
 I parent-FEM
 'my mother'

In East Tucanoan languages, alienable possession is also marked by the possessive marker *ya*, as in (7) below.

(7) *mi'i ya wi'i* (Tucano)
 2SG POSS house
 'your house'

Similar to East Tucanoan, Tariana also uses the possessive marker *ya* with cross-referencing prefixes and a genitive classifier to indicate possessed forms of alienably possessed items. In such cases, the head noun is usually omitted, as seen in examples (8) and (9) below. In contrast, Baniwa of Içana does not employ classifiers in possessive constructions.

(8) *pi-ya-ku* (*ama-ku*) (Tariana)
 2SG-POSS-CL:EXTENDED (hammock-CL:EXTENDED)¹²
 'your hammock'

(9) *mi'i ya-gĩ* (*pũ-gĩ*) (Tucano)
 2SG POSS-CL:LARGE (hammock-CL:LARGE)
 'your hammock'

4.2.1.2. Core case marking on personal pronouns with an animate referent and nouns, dependent on their topicality. North Arawak languages usually have no case marking. The case-marking system in Tariana shows similarities to East Tucanoan languages (see Aikhenvald 1994b; on case-marking in East Tucanoan languages, see Kinch 1977; Gralow 1980; Cook and Levinsohn 1983; and Wheeler 1987). First, personal pronouns with an animate referent have an obligatory opposition between subject case (used to mark A/S) and nonsubject case, used to mark O and a dative argument. And, second, other constituents (including third person pronouns with inanimate referent) have an optional topic marker (i.e., Tariana *-nuku*, East Tucanoan *-re*) that is affixed to any nonsubject constituent provided it is topical, or will be a future topic. Consider the examples in (10) and (11) below.

(10) *yei oha-gi-re Lenita-re ou-'u* (Piratapuya)
 I pen-REL-TOP Lenita-TOP give-PAST
 'I gave a pen to Lenita.'

- (11) *nuha pa-dana-ni-na-nuku Lenita-nuku nu-a* (Tariana)
 I IMP-write-FOC-CL:VERT-TOP Lenita-TOP 1SG-give
 'I gave a pen (lit., a vertical writing device) to Lenita.'

4.2.1.3. Locative case. East Tucanoan languages have one peripheral case marker, *-pi* (*Barasano -hi*) 'locative/directional, elative', which can cooccur with the definite/topical nonsubject marker *-re*, if the corresponding constituent is topical. Tariana has a corresponding suffix *-se*, e.g., Tucano *Bogota-pi-re*, Tariana *Bogota-se-nuku* 'Bogotá-LOC-TOP' 'to/from/in Bogotá'.

4.2.1.4. Gender. In North Arawak languages, gender opposition (feminine animate vs. the rest) is found in verbal cross-referencing markers and demonstratives. Classifiers are not used with demonstratives such as that in (12c). Tariana and East Tucanoan have gender opposition only in verbal cross-referencing markers. Demonstratives have special animate and inanimate forms, which also combine with classifiers. Moreover, the head noun is frequently omitted, as illustrated by examples (12a) and (12b).

- (12a) *ha-ku* (*ama-ku*) (Tariana)
 DEM:INAN-CL:EXTENDED hammock-CL:EXTENDED
 'this hammock'
- (12b) *ati-gĩ* (*pũ-gĩ*) (Tucano)
 DEM:INAN-CL:LARGE hammock-CL:LARGE
 'this hammock'
- (12c) *hliehẽ pieta* (Baniwa of Içana)
 DEM+NF hammock
 'this hammock'

4.2.1.5. Classifiers and repeaters. North Arawak and East Tucanoan have numeral, concordial, and genitive classifiers (see Barnes 1990; Derbyshire and Payne 1990; Aikhenvald 1994).

• In North Arawak animate nonhuman nouns are generally classified by their shape, as illustrated by Baniwa of Içana in (13c) below. Both Tariana and Tucano, however, have a special class for animate nouns, as seen in (13a) and (13b).

- (13a) *api/a.pi hanu-ite* (Tariana)
 snake big-CL:AN
 'a big snake'
- (13b) *pinõ phai-gi* (Tucano)
 snake big-CL:AN
 'a big snake'

- (13c) *a:pi maka-khay* (Baniwa of Içana)
 snake big-CL:CURV
 ‘a big snake’¹³

Baniwa of Içana has a total of forty-four classifiers, including a residual class for unclassifiable items (see Aikhenvald forthcoming b), for which both Tariana and Tucano use “repeaters.” Consider the following examples:

- (14a) *panisi hanu-panisi* (Tariana)
 house big-HOUSE
 ‘a big house’
- (14b) *wi'i phai-gi-wi'i* (Tucano)
 house big-CL:AN-HOUSE
 ‘a big house’
- (14c) *panți maka-dapana* (Baniwa of Içana)
 house big-CL:HAB
 ‘a big house’

The residual classifier *-da:ji* is shown in (14d).

- (14d) *kamisa maka-da:ji* (Baniwa of Içana)
 shirt big-CL:RES
 ‘a big shirt’

“Repeaters” can be used as “ad hoc” classifiers in Tariana and East Tucanoan. Thus, classifying morphemes are potentially an open class (see Aikhenvald 1994a for discussion). The use of a “repeater” in Tariana is illustrated in (15). *Panisi* ‘house’ is “repeated” as an agreement marker on the adjective *matfia* ‘good’, indicating the special importance of the newly introduced referent ‘house’. Otherwise, a classifier *-dapana* ‘habitation’ would be used, as shown in (16).

- (15) *nuhua matfia-panisi-mha panisi nu-na di-a-pidena* (Tariana)
 I good-HOUSE-PR house 1SG-want 3SGNF-say-PART
 ‘I want a really good house, he (the man) said (to the magic ring).’
- (16) *kayu diha di-sata-ka diha depita hiku-pidana panisi*
 so he 3SGNF-ask-SEQ he night+ADV appear-PART house
matfia-dapana *thuya a:ja-dapana-pidana hiku*
good-CL:HAB all EXIST-CL:HAB-PART appear

diha-dapana-se-pidana naha matfia-dapana-se kahwi
 he-CL:HAB-LOC-PART they good-CL:HAB-LOC wake up

na-ka:-niki (Tariana)
 3PL+go-SEQ-COMPL

'After he had asked like this, the same night a good house appeared, in which there was everything, they woke up in this (house), a beautiful house.'

Classifiers are widely used in anaphoric and discourse-backgrounding functions, in which the head noun is often omitted in East Tucanoan and Tariana, as in (16) above, but not in Baniwa of Içana. Tariana and East Tucanoan also have portmanteau *plural + classifier* morphemes, which are absent from other North Arawak languages.

4.2.1.6. Plural and plural agreement. Unlike North Arawak, Tariana and East Tucanoan distinguish between animate and inanimate plurals. Plural agreement is obligatory in a noun phrase. There are also many suppletive plural forms, especially for kinship nouns.

4.2.1.7. Cross-referencing. Baniwa of Içana has three persons, an impersonal marker *pa-* and an indefinite person marker *i-* on verbs and possessed nouns and adpositions. The indefinite person marker is used when the subject (A/S_a) or the possessor is in a focused position, preposed to the verb. Example (17a) illustrates the third person cross-referencing marker *ɟi-* on a transitive verb with a postposed, nonfocused subject, while example (17b) illustrates its use in an adpositional construction. Example (18a) shows the indefinite person marker *i-* on the transitive verb with a focused subject, preposed to the predicate, whereas (18b) gives its use in an adpositional construction.

(17a) *ɟi-aku atfiãɟi* (Baniwa of Içana)
 3SGNF-say man
 'The man says . . .'

(17b) *ɟi-fiu João* (Baniwa of Içana)
 3SGNF-for John
 'for John'

(18a) *atfiãɟi i-aku* (Baniwa of Içana)
 man INDF-say
 'The man says'

(18b) *João i-fiu* (Baniwa of Içana)
 John INDF-for
 'for John'

East Tucanoan languages and Tariana have three persons and an impersonal in the pronominal system. Unlike East Tucanoan languages, Tariana has the indefinite person marker *i-*, which is used on possessed nouns and some adpositions. The indefinite person marker is no longer used on verbs (see Aikhenvald 1995b). Example (19) below illustrates its use on a postposition with a preposed argument. In (20), preposition *-pumi* ‘after’ is employed with a third person cross-referencing prefix *di-* (cognate to Baniwa of Içana *ɟi-*), together with a pronominal argument.¹⁴

- (19) *pa-kapi kamu-pe i-pumi diha di-mia di-uka*
 one-hand year-PL INDF-after he 3SGNF-drown 3SGNF-arrive

lape-se (Tariana)
 mud-LOC

‘After five years (when) he (the turtle) finally drowned (lit., ‘arrive-drown’) in the mud.’

- (20) *di-pumi diha-kaiduku-se naha na-patu-ka na:-ka*
3SGNF-after he-BEACH-LOC they 3PL-beach canoe-SEQ 3PL+go-SEQ

naha na-ka-ka na-sue-ta (Tariana)
 they 3PL-look-SEQ 3PL-stay+CAUS-CAUS

‘After that they beached (their canoe) on the beach, they looked up.’

In spontaneous conversation, speakers tend not to utilize the indefinite person marker even on a possessed noun. For instance, example (21a), from spontaneous speech, contains a third person singular nonfeminine marker *di-* on a possessed noun, instead of an indefinite person marker *i-*, whereas example (21b), from more careful speech, has an indefinite person marker *i-*.

- (21a) *pa-piu-naki di-kawa* (Tariana)
 IMP-sweep-CL:STICK-LIKE 3SGNF-leg

‘the handle of a broom’

- (21b) *pa-piu-naki i-kawa* (Tariana)
 IMP-sweep-CL:STICK-LIKE INDF-leg

‘the handle of a broom’

The restriction in use of indefinite person marker *i-* in Tariana is the result of influence from the East Tucanoan pattern.

4.2.2. Verbal morphology and syntax.

4.2.2.1. Verbal morphology. Unlike other North Arawak languages, Tariana, like East Tucanoan, distinguishes between eyewitnessed and non-eyewit-

nessed action, immediate and distant future, remote past and distantly remote past, conditional mood, and several imperatives (cf. Barnes 1985). Again, like East Tucanoan, Tariana has a number of clitics that refer to the manner of action (aktionsart), and to other characteristics of action (e.g., *-pena* 'for the sake of', *-pana* 'around', *-ta* 'usually', *-kha*, *khana* 'motion away from', *-tha* 'frustrative', and *-thaka* 'contraexpectation'). Some can be traced back to incorporated verb roots. East Tucanoan and Tariana have suffixed negation, a special negative copula, and special negative words, such as Tariana *hãida* 'I do not know' and Tariana *kuripua* 'there is nothing'. They also employ a reflexive-reciprocal pronoun, whereas North Arawak languages other than Tariana have a reflexive-reciprocal suffix on the verb (rarely used in Tariana) as a verbal category. Furthermore, verbal root compounding in Tariana and the extensive development of verbal serialization also result from the influence of East Tucanoan languages (see Aikhenvald 1995c).¹⁵

East Tucanoan languages have a number of compound verbal forms that consist of a participial form of the main verb and an auxiliary. In general, Tariana has verb serialization that is characteristic of North Arawak languages (see Aikhenvald 1995c). In relaxed speech younger people in Tariana replace serial verb constructions with a sequence *relative form of the main verb + auxiliary-like stance verb*, following the East Tucanoan pattern *participial form of the main verb + auxiliary*. An example of this construction is given in (22).

- (22) *diha di-ka-ʒi dy-ema diha kanapiri yehwe-se* (Tariana)
 he 3SGNF-see-REL 3SGNF-stand he grass INDF+middle-LOC
 'He (the monkey) was standing and looking (at the people) in the middle of the grass.'

By contrast, (23) is an example of a serial verb construction with the same stance verb *-ema* 'stand, be doing something for a long time', but without the relative marker.

- (23) *dhima dy-ema-pidena di-nisaka diha tfinu pisana*
 3SGNF+hear 3SG-stand-PART 3SGNF-comrade he dog cat
a.ʒia-pidena (Tariana)
 EXIST-PART
 'He (the man in prison) was perceiving (lit., hear stand) that his comrades, a dog and a cat, were there.'

4.2.2.2. Complex sentences. Tariana and East Tucanoan have long chains of juxtaposed clauses, and employ relative verbal forms ("participles") to mark the predicate of a subordinate clause as in (24).

- (24) *diha-pukui-nuku* *di-sata-pidana* *nuhua* *ha-na*
 he-CL:ROUND HOLLOW-TOP 3SGNF-tell-PART I DEM-CL:VERT

hyapa-na-nuku *ha-ne-riku-ma-se* *dy-ema-ji-mha*
 hill-CL:VERT-TOP DEM-DIST-DER-PAIR-LOC 3SGNF-stand-REL-PR

nu-na *hajite* (Tariana)
 1SG-want white+CL:GEN:AN

'He (the young man) told the round hollow one (the magic ring), I want this hill to stand on the other side (of the river) in the morning.'

Other North Arawak languages prefer sequencing verbal clitics, similar to medial verbs in Papuan languages (cf. Aikhenvald 1995a, forthcoming c, on sequencing clitics in Bare and Warekena). The use of a sequential enclitic *-ka* in Baniwa of Içana, which marks a complement clause, is exemplified by (25).

- (25) *ji-kapa-pida* *ji-nu-ka* *ji-a* (Baniwa of Içana)
 3SGNF-see-PART 3SGNF-come-SEQ 3SGNF-go
 'He (the heron) saw him (colibri) coming.'

Sequential clitic *-ka* is also used to mark the predicate of a complement clause in Tariana, especially in the narratives of older speakers, as in the case of (26).

- (26) *kwe-mha* *pi-na* *phia* *ha-ma-nuku* *nu-ni-ka*
 how-PR 2SG-want you DEM-FEM-TOP 1SG-do-SEQ

ka-duhyã-karu-nuku (Tariana)
 REL-dislike-PURP-TOP

'What do you want me to do to this one (woman) who does not like you?' (said the snakeman).

Thus, Tariana combines strategies of complementation that are similar to both East Tucanoan and North Arawak languages.

Unlike other North Arawak languages, however, Tariana, like East Tucanoan, has a complex system of switch-reference marked by sequential clitics. In Tariana, the clitic *-nisawa*, as shown in (27), is employed for a different subject, whereas *-sita*, in (28), is used for the same subject.

- (27) *kav-di-ni-nisawa* *diha* *kuisi-se* *di-wa* *di-a-pidena*
 so-3SGNF-do-AFTER:DS he shore-LOC 3SGNF-enter 3SGNF-go-PART

di-wa *di-a* *pathina* *di-mia-kha* (Tariana)
 3SGNF-enter 3SGNF-go suddenly 3SGNF-dive-AWAY

'After he (the man) did this, he (the otter) came up on the shore, entered (water) and dived away.'

- (28) *duhua du-mara-pidena du-nu-sita du-nu-ka duma*
 she 3SGF-float-PART 3SGF-come-AFTER:SS 3SGF-come 3SGF+look for
dhewi-nuku (Tariana)
 3SGNF+pip-TOP

'After she floated downstream, she came to look for the pip (of pupunha fruit).'

4.2.2.3. Discourse techniques. North Arawak languages, similar to most South American Indian languages, avoid sentences with two full noun phrases, especially when one of them is a personal pronoun. Independent personal pronouns are only used emphatically. Tariana, similar to East Tucanoan languages, makes wide use of personal pronouns for pronominalization, as illustrated in (27) and (28) above.

Unlike North Arawak languages, Tariana and East Tucanoan use a "re-suming" phrase at the end of every paragraph: Tucano *tojo wee-gi* (so do-3SGMASC), Tariana *kay di-ni* (so 3SGNF-do) 'then, thus, and so' (lit., 'so he/she/they did'). It is utilized to point out a consequence, or the result of an action, as in (29) below.

- (29) *kay-na-ni na-nu nema-sina* (Tariana)
 so-3PL-do 3PL-come 3PL-stay-REMOTE PAST

'When they (Tariana ancestors) did so (i.e., overcame their enemies), they came to stay (on the Vaupes).'

4.3. Semantics. Inherited items in Tariana have been reinterpreted according to East Tucanoan semantic "molds," calques, and identical derivations.

Identical derivations in East Tucanoan languages and Tariana involve loan cultural items (e.g., 'hospital', 'watch', 'plane', 'airstrip'). Examples are given in (30a)–(31b) below.

- (30a) *ihko-wi'i* (Tucano)
 medicine-house
 'hospital'

- (30b) *ohko-wii* (Piratapuya)
 medicine-house
 'hospital'

- (30c) *di-tape-dapana* (Tariana)
 3SGNF-medicine-CL:HOUSE
 'hospital'

- (31a) *imiko keokha* (Tucano)
 day mark
 'clock, watch'

- (31b) *ehkwapi ka-wa-ka-da* (Tariana)
 day REL-mark-TH-CL:ROUND
 'watch'

Baniwa of Içana, in contrast, employs Portuguese loanwords for such items.

Other East Tucanoan calques in Tariana include Tariana *pai isado* 'nun' (lit., 'father woman'; cf. Guanano *pahia nomia*), Tariana *yarusi haniri* 'a rich person' (lit., 'father of merchandise'; cf. Tucano *ahpeki-pahki*).

Tariana has also acquired a number of lexical shifts under East Tucanoan influence, e.g., Tucano *muhipũ*, Tariana *keri* 'sun' or 'moon'; Baniwa of Içana *kezi* 'moon' (Proto-Arawak **ketfi* 'sun, day' [Payne 1991:420]); Baniwa of Içana *kamui* 'sun', Tariana *kamu* 'heat, summer' (Proto-Arawak **kamui* 'sun, summer' [Payne 1991:420]); Tucano *di*, Tariana *iri* 'sap' (hence, 'rubber, plastic') or 'blood' (cf. Baniwa of Içana *iri* 'blood', *dzeka* 'sap, rubber, plastic' and Tariana *yeka* 'rubber').

The numeral 'four' in Tariana is a calque from Tucano, as shown in examples (32a)–(32c).

- (32a) *kephunipe (ka-iphu-nipe)* (Tariana)
 REL-accompany-NOM
 'four, the one who is accompanied'
- (32b) *ba'pari-ti-se* (Tucano) (Brüzzi 1967:115)
 couple, companion-VB POSS-AFF
 'four; the one who has a companion'
- (32c) *ji-kwa-da-ka* (Baniwa of Içana)
 3SGNF-be enough-CL:ROUND-DECL
 'four; the one that is enough'

Direct borrowings from East Tucanoan to Tariana are limited to the two phonemes *o* and *i* (both with an extremely low functional load), possibly, one verbal clitic (Tariana *-buhta* 'conditional', Tucano *-botha* 'conditional-again'), and one lexical item, Tariana *waliro, boliro* 'evil spirit', Tucano *boraro*.

Furthermore, Tariana and East Tucanoan share several old loanwords from Lingua Geral (e.g., *bue* 'to study, to teach') and a few diffused terms of unknown origin, also found in Baniwa of Içana (e.g., *yumuku, ñumuku* 'mash', *kapi, kahpi* 'ritual whisky').

Tariana kinship terms have been heavily influenced by East Tucanoan (see Aikhenvald in preparation). Among the most obvious points is the distinction between vocative and nonvocative forms for each kinship term, e.g.,

Tariana *nu-itu* 'my daughter' (speaking about a daughter), *nu-ytō* 'daughter!' (addressing a daughter') (see Goehner, West, and Merrifield 1985 for a similar distinction in Tucano).

5. Independent innovations and language attrition in Tariana.

5.1. Independent innovations. Independent innovations in Tariana are grammatical phenomena divergent from those found in closely related languages (e.g., Baniwa of Içana), but not explainable in terms of the influence of East Tucanoan languages.

In morphosyntax, Tariana has lost the morphological split ergativity of Proto-Arawak marked by cross-referencing affixes, currently attested in Baniwa of Içana and Warekena (see further discussion of cross-referencing affixes and enclitics in Baniwa of Içana, Warekena, Bare, and Tariana in Aikhenvald 1995b), where:

A=S_a with cross-referencing prefixes, and

O=S_o with cross-referencing enclitics.

(Here A is the subject of a transitive verb, S_a is the subject of an intransitive active verb, O is the object of a transitive verb, S_o is the subject of an intransitive stative verb, in agreement with Dixon [1994].)

Tariana has lost cross-referencing enclitics. The loss of those enclitics is rather widespread in Arawak languages, and is not necessarily related to language obsolescence (cf. the loss of cross-referencing enclitics in the Xinguan Arawak languages, Waura, Mehinaku, and Yawalapiti, discussed in Aikhenvald forthcoming a). Nonetheless, Tariana has retained the common Arawak division of verbs into transitive and active (which take cross-referencing prefixes) and intransitive stative, which take no prefixes.

The extension of instrumental *-ne* to an ergative marker is, apparently, the result of an independent development (see Aikhenvald 1994b). The suffix *-ne*, is used to mark A, if the latter constituent is in contrastive focus. In (33) *-ne* marks an instrumental constituent. The A subject in (34) (underlined) is not in contrastive focus, and thus is not marked with this suffix. In (35), the continuation of the previous example, the subject (underlined) is in contrastive focus, and therefore is marked by *-ne*.

- (33) *da:pi-kha-ne nuya-pidena u:ni-se* (Tariana)
vine-CL:CURV-INS 3SGF+hit-PART water-LOC

'She (the snake woman) hit with a vine on the water.'

- (34) *diha* *na-na* *ka-maē-kaji* *ma-ka-de-pidena diha ñewi*
he 3PL-OBJ REL-cheat+CAUS-PAST REL NEG-see-NEG-PART he otter

di-aphua-ka di-wa di-nu (Tariana)
3SGNF-dive-SEQ 3SGNF-enter 3SGNF-come

'The one who lied to them (others) did not see the otter come diving.'

- (35) *pa:ti-ne na-ka-pidena na-sita nekwe-se-se-pidena di-mara*
 other-ERG 3PL-see-PART 3PL-finish 3PL+among-CONTR-LOC-PART float
di-nu di-a (Tariana)
 3SGNF-come 3SGNF-go
 ‘Others (in contrast to the liar) finally did see (the otter) moving floating toward them.’

Unlike North Arawak languages, East Tucanoan languages are not split ergative. The innovation of split ergativity in Tariana may be one means by which that language “preserves” the morphological ergativity of cross-referencing enclitics that was lost from Proto-Arawak. This pattern is typologically very common (Dixon 1994:57), but unique among Arawak languages. It cannot be attributed to East Tucanoan influence, since those languages display a very consistent nominative type of morphology and syntax.

Serial constructions in Tariana (see Aikhenvald 1995c) display a number of properties that are different from those in both East Tucanoan and North Arawak. For instance, they have concordant dependent inflection in causative serial constructions and obligatory serialization of locutionary verbs. The difference between causative serial verb constructions in Warekena, Bare, and Tariana is illustrated in (36)–(38) below. Here, the causative serial verb constructions in Warekena and Bare consist of two verbs that are marked for different subjects.

- (36) *wa-hã ni-we fya-wa ba-buya*
 then-PAUSAL 3PL-leave 3SGNF+stay-NONACC one-CL:TIME
yafapua (Warekena)
 night
 ‘Then they let him stay one night.’
- (37) *i-d'ekada nu-tfuma-ma-ka* (Bare)
 3SGNF-make 1SG-cry-RED-DECL
 ‘He (the stingray that bit me) made me cry very much.’

On the other hand, in Tariana these constructions are different in that both components of a serial verb construction cross-reference the A subject of the causative verb *-a* ‘make, give’, as in (38).

- (38) *du-a du-hña tfiãqi-nuku* (Tariana)
 3SGF-make 3SGF-eat man-TOP
 ‘She fed (lit., make eat) the man.’

As seen in example (39), Tariana also has analytic causatives that signify indirect causation and do not require the same inflection on both verbs. They do not, however, qualify as serial verb constructions (see Aikhenvald 1995c).

- (39) *nu-na ma:tfi nu-ʒena-ka-mha i-ni-yha* (Tariana)
 1SG-OBJ bad 1SG-feel-SEQ-PR 2PL-do-APR

'You made me feel miserable; you acted a little in such a way that I feel miserable'
 (said the mother to the young man who had gone to live with snakes).'

5.2. Language attrition phenomena. As mentioned in section 1.4 above, Tariana is a dying language, since children are no longer learning it. The younger generation of Tariana speakers prefer to use Tucano when speaking among themselves or to their wives. They consistently use Tariana only when speaking to the members of their father's family. A number of phenomena can be pointed out as discernible evidence of language attrition.

In phonology, language attrition in Tariana is reflected in the excessive variability of certain inherited phonemes that have a low functional load. Aspirated stops, nasals, and the bilabial glide *w* vary with their unaspirated counterparts. Short and long vowels tend to be in free variation. There is also a considerable degree of variation and hypercorrection in the application of phonological processes at morpheme boundaries.

In morphology, Tariana has some signs of morphological reduction. The irregular possessive form of the inalienably possessed noun *panisi* 'house', *-pana* (present in every North Arawak language of the region), is currently falling out of use. *Panisi* 'house' is increasingly treated as alienably possessed, like *wi'i* 'house' in East Tucanoan languages. For example, the form *nuha panisi* 'my house' (lit., 'I house') can sometimes be heard (see section 4.2.1.1 above). The irregular form *nu-pana* is replaced by a possessive-classifier construction. For instance, one frequently hears *nu-ya-dapana* (1SG-POSS-CL:HAB) instead of *nu-pana* (the latter form is acknowledged as acceptable, but not used). Some verbal categories are also falling out of use. For example, the reciprocal form *-kaka* is scarcely used by younger people. In addition, the competence of speakers differs in usage of aspect, aktionsart, and clitics that mark switch-reference.

Syntactic reduction in Tariana is also rather extreme. A Tucano-like clause-chaining strategy with the predicate of subordinate clause in participle form tends to oust the Arawak-like one, with sequential forms of predicates of subordinate clauses. Cleft constructions in young people's speech have resulted from the influence of Portuguese 'it is me who', with an interrogative pronoun. Example (40a) is a cleft construction that was written in a letter by a young speaker of Tariana. Its equivalent in regional Portuguese is given in (40b) below.

- (40a) *Safa nu-ketfi-do phia kwa-ka pehpani Australia-se* (Tariana)
 Sasha 1SG-relative-FEM you who-DECL 2SG-work Australia-LOC

'Sasha, my relative, you are the one who works in Australia.'

(40b) *Sacha minha parente você é que trabalha na*
 Sasha my:FEM relative you are who/what works in

Austrália (Portuguese)
 Australia

'Sasha, my relative, you are the one who works in Australia.'

There are no cleft constructions of this kind in traditional Tariana.

Lexical obsolescence and loss differ from one speaker to another. All the speakers I encountered had difficulty in remembering kinship terms for cousins and uncles, especially the suppletive and semi-suppletive vocative forms. Descriptive terms were often used for birds and animals, and their "correct" names were remembered later.

6. Concluding remarks. This paper has considered the diffusion of phonological, grammatical, and semantic patterns in Tariana, the only North Arawak language remaining among the East Tucanoan languages of the Vaupes area. In phonology, grammatical categories, agreement patterns, and semantics, Tariana exhibits a considerable degree of structural isomorphism with East Tucanoan languages. Nonetheless, this isomorphism is not complete, since Tariana does not exhibit the massive borrowing of grammar that is found in other languages in contact situations, such as in Anglo-Romani, Ma'a, or Mednyj Aleut (Thomason and Kaufman 1988:104).

In general, areal diffusion in Tariana has the following characteristics:

- obsolescence and subsequent loss of categories absent in East Tucanoan languages;
- emergence of new categories present in East Tucanoan and absent in Arawak, e.g., case marking connected with topicality, evidentials, verb compounding, and switch-reference; and
- structural leveling of Tariana to agree with East Tucanoan syntactic structures and discourse techniques.

The areas of Tariana grammar most affected by the influence of East Tucanoan languages are phonology, verbal and nominal morphological categories, agreement, the marking of grammatical relations interacting with topicality, syntactic structures, such as clause-chaining strategies, and discourse techniques. Tariana retains a considerable number of morphemes of Arawak origin, as well as a predominantly suffixing word structure (with a limited number of prefixes).¹⁶ This evidence suggests that areal diffusion in the Vaupes region does not affect word structure, as it affects the rest of the language's grammar.

As in other linguistic areas of the world (see Sherzer 1976:255), both internal linguistic factors and socio-cultural conditions, such as codeswitching and exogamous intermarriage (with its obligatory multilingualism), account for the diffusion of linguistic traits. Language attitudes, such as a strong

inhibition against language-mixing, result in almost no direct lexical diffusion, but do allow diffusion of phonological and morphosyntactic patterns.

As has been pointed out by Sorensen (1972 [1967]), East Tucanoan languages on the Colombian side, where Tariana has never been traditionally spoken, share a fair number of linguistic traits and thus form a linguistic area. However, since these languages are closely related genetically, it is hard to distinguish areally diffused from genetically inherited features.

Dâw, Hupda and Yuhup—Maku languages spoken in the Vaupes and upper Rio Negro in Brazil—show several patterns of unilateral diffusion from East Tucanoan languages. This unilateral character of diffusion is accounted for by the fact that Makus used to know at least one East Tucanoan language, but not vice versa. Contact between Makus and East Tucanoans is much older than that between East Tucanoans and Tarianas. Moreover, the degree of cultural integration between East Tucanoans and Makus is much less than that between Tarianas and East Tucanoans.

Tariana and East Tucanoan languages have been in contact for no more than approximately four hundred years. Although exact dates are not known, the settlement of East Tucanoan tribes in the Vaupes goes further back (cf. Nimuendajú 1982:169–70). Apparently, other known linguistic areas of the world, such as the Balkans, Arnhem land (see Heath 1978, 1981), Mesoamerica (Campbell, Kaufman, and Smith-Stark 1986), South Asia (Masica 1976), and linguistic areas of American Indian languages north of Mexico (see Bright and Sherzer 1976; Sherzer 1976) are considerably older. Still, sharing cultural traits does not necessarily entail creation of a linguistic area. The Great Plains region of the United States, for example, is a recognized culture area, but not a linguistic one. It has been argued that the languages of that region have not had sufficient time to develop significant areal traits (Sherzer 1973; Bright and Sherzer 1976:235).¹⁷

The Vaupes linguistic area can be compared, both in time depth and in the degree of multilingualism, to the Kupwar village in India, described by Gumpertz and Wilson (1971:153), where the coexistence of Urdu, Marathi, and Kannada goes back about three or four centuries when Urdu-speaking Muslims arrived in the region. Speakers of Kannada and Marathi have been in the region for more than six centuries. The linguistic area of Tariana-Tucano contact, however, has not attained the same degree of morphosyntactic isomorphism between genetically unrelated languages that exists in the Kupwar village. In all likelihood, this is a partial consequence of different language attitudes in the Vaupes, where there is a “puristic” tendency to keep languages as much apart as possible, and to discourage lexical borrowing and lexical diffusion.

Thus, Tariana is an illustrative case of the interaction and integration of grammatical and semantic patterns acquired through diffusion in a comparatively young linguistic area characterized by obligatory multilingualism.

Appendix
Phonological Systems of Tariana,
Baniwa of Içana, and East Tucanoan

Tariana (North Arawak) Consonants

	BILABIAL	DENTAL	ALVEO-PALATAL	PALATAL VELAR	GLOTTAL
VOICELESS STOP	<i>p</i>	<i>t</i>		<i>k</i>	λ
ASPIRATED VOICELESS STOP	<i>ph</i>	<i>th</i>		<i>kh</i>	
VOICED STOP	<i>b*</i>	<i>d</i>		<i>(g)</i>	
ASPIRATED VOICED STOP		<i>dh</i>			
VOICELESS FRICATIVE			<i>s</i>		<i>h</i>
VOICELESS AFFRICATE			<i>ts*</i>	<i>tf*</i>	
VOICED AFFRICATE				<i>dz*</i>	
NASAL STOP	<i>m</i>	<i>n</i>		<i>ñ</i>	
ASPIRATED NASAL STOP	<i>hm</i>	<i>hn</i>		<i>hñ*</i>	
FLAP			<i>ɺ</i>		
LIQUID			<i>l</i>		
VIBRANT			<i>r</i>		
GLIDE	<i>w</i>		<i>y</i>		
ASPIRATED GLIDE	<i>hw</i>				

Source: Aikhenvald (in preparation).

N.B.: (C) = consonants found only in loan words; C* = rare phonemes with a low functional load.

Tariana (North Arawak) Vowels

	FRONT			CENTRAL			BACK		
	SHORT	NASAL	LONG	SHORT	NASAL	LONG	SHORT	NASAL	LONG
HIGH	<i>i</i>	<i>ĩ</i>	<i>i:</i>	<i>ɨ</i>			<i>u</i>	<i>ũ</i>	<i>u:</i>
MIDDLE	<i>e</i>	<i>ẽ</i>	<i>e:</i>	<i>o</i>	<i>õ</i>	<i>o:</i>			
LOW							<i>a</i>	<i>ã</i>	<i>a:</i>

Source: Aikhenvald (in preparation).

Baniwa of Içana (North Arawak) Consonants

	BILABIAL	DENTAL	ALVEOLAR	ALVEO-PALATAL	PALATAL	VELAR	GLOTTAL
VOICELESS STOP	<i>p</i>	<i>t</i>	<i>t</i>			<i>k</i>	
ASP VCLESS STOP	<i>ph</i>	<i>th</i>				<i>kh</i>	
VOICED STOP	<i>b</i>	<i>d</i>				<i>(g)</i>	
VOICED FRICATIVE	<i>(v)</i>						
VCLESS FRICATIVE							<i>h</i>
RETR VCLESS FRIC				<i>f</i>			
RETR VCD FRICATIVE					<i>ʒ</i>		
VCLESS AFFRICATE				<i>ts</i>	<i>tʃ</i>		
VOICED AFFRICATE				<i>dz</i>			
NASAL	<i>m</i>	<i>n</i>			<i>ɲ</i>		
ASPIRATED NASAL	<i>hm</i>	<i>hn</i>			<i>hɲ</i>		
FLAP			<i>ɺ</i>				
ASPIRATED FLAP			<i>hɺ</i>				
GLIDE	<i>w</i>				<i>y</i>		
ASPIRATED GLIDE	<i>hw</i>						

Sources: Scheibe (1958) and Taylor (1991).

Baniwa of Içana (North Arawak) Vowels

	FRONT		CENTRAL		BACK	
	SHORT	LONG	SHORT	LONG	SHORT	LONG
HIGH	<i>i</i>	<i>i:</i>			<i>u</i>	<i>u:</i>
LOW	<i>e</i>	<i>e:</i>	<i>a</i>	<i>a:</i>		

Sources: Scheibe (1958) and Taylor (1991).

N.B.: *hn*, *hm*, *hw* in Tariana and Baniwa of Içana and *hɺ* in Baniwa of Içana are phonetically realized as preaspirated (cf. Valadares 1994). Baniwa of Içana *t* corresponds to Tariana *s* (e.g., Baniwa of Içana *panʒi*, Tariana *panisi* 'house'). Baniwa of Içana has positional nasalization conditioned by nasal consonants and *h* (see Aikhenvald forthcoming d). Baniwa of Içana also has a stress system (possibly, with some characteristics of pitch accent; see Valadares 1994).

East Tucanoan Consonants

	BILABIAL	ALVEOLAR	PALATAL	VELAR	GLOTTAL
VOICELESS STOP		<i>t</i>		<i>k</i>	<i>ʔ</i>
VOICED STOP	<i>b</i>	<i>d</i>		<i>g</i>	
VOICELESS FRICATIVE		<i>s</i>			<i>h</i>
VIBRANT		<i>r</i>			
GLIDE	<i>w</i>		<i>y</i>		

Sources: Piratapuyo, (Klumpp and Klumpp 1976), Tucano (West and Welch 1967), Desano (Miller 1976), Tuyuca (Barnes 1992), Carapana (Metzger 1981), and Barasano (Jones and Jones 1991).

N.B.: Guanano (Waltz and Waltz 1967) also has a series of voiceless aspirated stops *ph*, *th*, *kh*, and a palatal affricate *tʃ*. Cubeo (Salser 1971) has a voiced fricative *v* and a palatal affricate *ts*, but no *s*.

East Tucanoan Vowels

	FRONT		CENTRAL		BACK	
	SIMPLE	NASAL	SIMPLE	NASAL	SIMPLE	NASAL
HIGH	<i>i</i>	<i>ĩ</i>	<i>ɨ</i>	<i>ĩ</i>	<i>u</i>	<i>ũ</i>
LOW	<i>e</i>	<i>ẽ</i>	<i>a</i>	<i>ã</i>	<i>o</i>	<i>õ</i>

Sources: Piratapuyo, (Klumpp and Klumpp 1976), Tucano (West and Welch 1967), Desano (Miller 1976), Tuyuca (Barnes 1992), Carapana (Metzger 1981), and Barasano (Jones and Jones 1991).

N.B.: Nasalization and pitch are suprasegmental features (see Levinsohn 1992).

Notes

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Abbreviations. The following grammatical abbreviations are used: A = subject of a transitive verb; ADV = adverbial; AFF = affix; AN = animate; APR = approximative; ASP = aspirated; AUG = augmentative; CAUS = causative; CL = classifier; COMPL = completive; CONTR = contrast; CURV = curvilinear; DECL = declarative; DEM = demonstrative; DER = derivational suffix; DIST = distant; DS = different subject; ERG = ergative; EXIST = existential; F = feminine; FEM = feminine; FOC = focus; FRIC = fricative; GEN = generic; HAB = habitat; IMP = impersonal; INAN = inanimate; INDF = indefinite person; INS = instrumental; LOC = locative; MASC = masculine; NEG = negative; NF = nonfeminine; NOM = nominalizing; NONACC = nonaccomplished; NPOSS = nonpossessed; O = object of a transitive verb; PART = particle; PL = plural; POSS = possessive; PR = progressive; PROB = probability; PURP = purposive; RED = reduplication; REL = relative; RES = residual; RETR = retroflex; S = subject; S_a = subject of an intransitive active verb; S_o = subject of an intransitive stative verb; SEQ = sequential; SG = singular; SS = same subject; TH = thematic; TOP = topical; VB = verbal; VCD = voiced; VCELESS = voiceless; VERT = vertical.

1. The Tucano live along the Vaupes, Tiquie, and Papuri rivers and their tributaries. Tucano is the lingua franca of the region, thus the actual number of its speakers is probably much higher. Piratapuya (Piratapuyo) is spoken by 1,100 people along the lower Papuri in Colombia and Brazil. Although 613 Piratapuya live in Brazil (Rodrigues 1986), the actual number of speakers there is considerably less (see table 1). Guanano (Wanana) is spoken by approximately 1,000 people in the Vaupes of Brazil and Colombia. According to Rodrigues (1986), there are 555 speakers of Guanano in Brazil (but see table 1).

Guanano and Piratapuya are closely related dialects, whose speakers do not intermarry since they are considered "brothers." Desano (Desana) is spoken on the Papuri and Vaupes rivers in Colombia and Brazil. The Cubeo (Kubeu, Kubewa, Kubewana) live

along the Vaupes River and its northern tributaries. Cubeo is also spoken on the upper Aiari (a tributary of the Içana River), where it interacts with Baniwa of Içana (see Galvão 1979; Nimuendajú 1982:170; Gomez-Imbert forthcoming). Tuyuca is spoken along the Papuri, Tiquie, and Inambu rivers, in both Brazil and Colombia (see Huber and Reed 1992; Rodrigues 1986).

The following East Tucanoan languages belong to the Vaupes linguistic area, but are scarcely represented in the Brazilian Vaupes described here—or are not known to my consultants of Tariana and other East Tucanoan languages:

(i) Macuna is spoken by a total of 350 people who live along the Apaporis and Piraparaná rivers of the southern Vaupes region in Colombia (Smothermon and Smothermon 1993), and, according to Huber and Reed (1992), in Brazil by a small number of individuals (they are not mentioned in Rodrigues 1986).

(ii) Yuriti (Juriti, Yutiti-tapuyo) is spoken by 200–250 people along the Paca River and Caño Tí; there are also thirty-five speakers in Brazil (Rodrigues 1986).

(iii) Bara and Waimaja (Eastern, or Central Tucanoan) are dialects. They are spoken by 500–600 people along the Caño Colorado, Caño Lobo, Inambú, and Caño Yapú rivers in the Vaupes region. Bara is called Northern Barasana by some linguists associated with the Summer Institute of Linguistics (see C. Hugh-Jones [1979:11–12] on the inappropriateness of this term). It is reported in Huber and Reed (1992:xxiii) that only one of the two Bara clans speak the language; the other one apparently speaks only Tucano. Rodrigues (1986:92) claims that there are forty-three speakers of Bara in Brazil.

(iv) Siriano is spoken by 500–600 people in Colombia (Huber and Reed 1992:xxvi) and by ten people in Brazil (Rodrigues 1986:92). In Colombia they live along the Paca, a tributary of the Papuri River, and the Viña, a tributary of the Paca.

(v) Barasana, also called Southern Barasana (Barasano, or Jānerā) and Taiwano (Eduria; both are close dialects) are spoken by approximately 250 people living along the Piraparaná River in the Vaupes region of Colombia (see Jones and Jones 1991).

(vi) Tatuyo is spoken by 350 people living along the Piraparaná River (southern Vaupes).

There are also fifty-five Yeba-masã speakers in Brazil (Rodrigues 1986; there is no data about them in Huber and Reed 1992).

A number of East Tucanoan languages are extinct, e.g., Mirititapuya (Middle Tiquie; see Sorensen 1972 [1967]:92), Arapaso (see Loukotka 1968:185), and Urubutapuya (see Loukotka 1968:185); hence the discrepancy between ethnic and language identity in the modern Brazilian Vaupes.

2. The genetic unity of Arawak languages was first recognized by Father Gilij in 1783, three years before Sir William Jones's famous statement about Indo-European. Though there are no doubts about the genetic affiliation of the majority of Arawak languages, there still are, however, problems of relationships within the family and possible genetic relationships with groups outside the family. The denomination of the family has been the subject of controversy among Arawak scholars for some time. The majority of native South American scholars use the name *Arawak* (*Aruák*) to refer to the group of languages that are unquestionably related. Nonetheless, a number of scholars, primarily North Americans, prefer to use the term *Arawak(-an)* to refer to much more doubtful genetic unities of a higher taxonomic order, and reserve the term *Maipuran*, or *Maipurean*, for the group of languages that are undoubtedly related (see Kaufman 1990; Payne 1991). Here, I follow Rodrigues (1986), keeping the denomination *Arawak* for the family of languages that are definitely related.

3. Many dialects of Baniwa of Içana/Kurripako (the majority of which are mutually intelligible) are spoken by approximately 3,000–4,000 people living along the Içana River and its tributaries, as well as along the upper Rio Negro itself, and in the adjacent regions of Colombia and Venezuela. Warekena, a dialect of Baniwa of Guainia,

is spoken by a few dozen people on the Xie River (Aikhenvald forthcoming c). Bare, once the most important language, is now almost extinct (Aikhenvald 1995a). Another minor language is old Warekena, or "Warena," spoken by a few elder people on the Xie River. Other North Arawak languages of the upper and middle Rio Negro region that became extinct during the nineteenth and twentieth centuries are indicated in map 2 with a dagger (e.g., Amarizana, Manao, Mandawaca [Mawaca], Passe, Wainuma, Wirina, Yabaana, Yumana [see Martius 1867; Koch-Grünberg 1911; Chaffanjon 1889; Civrieux and Lichy 1950], and Bahwana [Ramirez 1992]).

4. There are minor dialectal differences between the varieties of Santa Rosa, or Juquirá (also spoken in Iauarete) and of Periquitos (also spoken in Ji-Ponta). The language is no longer being learned by children. The present paper is based on fieldwork with the following six Tariana speakers, all from the family of Brito who speak a variety of Santa Rosa (Yuquica): Cândido (the father); his sons, Graciliano, Jovino, and José Luiz; his daughter Olívia; and his fraternal nephew Rafael. I have also worked with Eliseu Muniz, a speaker of the variety of Periquitos, and between 1991 and 1994 have done fieldwork with Baniwa of Içana, Warekena of Xie, Bare, Tucano, and Piratapuya.

5. The Maku are nomadic hunters and gatherers. According to Nimuendajú (1982) and Koch-Grünberg (1906), they are the autochthonous population of the region. Unlike Tucanos and Arawak-speaking peoples, they do not necessarily live along the rivers; many originally lived in the forest. Considered the lowest in the social hierarchy of the upper Rio Negro, they are basically "enslaved" by the culturally superior East Tucanoan and Arawak-speaking peoples. As a result, they do not participate in the marriage network. The following Maku groups, who speak distinct languages that are mutually unintelligible, live in the Vaupes area and display areal diffusional features: Dâw (Kamã), around São Gabriel da Cachoeira (83 people); Hupda, between the Papuri and Tiquie rivers (1,900 people); and Yuhup, south of Tiquie (300 people).

Other Maku languages spoken in the adjacent areas are: Bara, in the basin of the Papuri River in Colombia; Puinave, in the region of the Inirida River in Colombia and Venezuela (2,000 in Colombia, 240 in Venezuela); Nukak, in the jungle regions between the Guaviare and Inirida rivers (around 300–600 people); and Kakua, along the lower Vaupes River (around 150 people; Martins 1994).

We presently do not have sufficient linguistic data to decide whether or not these languages share areal properties with neighboring languages.

Nadëb, spoken by a few hundred people (Weir 1984, 1990), and Shiriwe (Valteir Martins p.c. 1995), spoken by a few dozen people in the Middle Rio Negro region, do not belong to the Vaupes geographical and linguistic area. Nadëb and Shiriwe data are crucial for distinguishing areal and genetic features in the Maku languages of the upper Rio Negro.

6. The spread of *Língua Geral* (Nheengatu) and extensive language loss throughout the entire upper Rio Negro region have resulted in a growing discrepancy between tribal and language identity. For instance, the Baniwas of the lower Içana, who lost their language, and effectively speak only *Língua Geral* and Portuguese, still identify themselves as Baniwas. The same can be said about the younger, indigenous inhabitants of the Xie, who still identify themselves as Warekenas, and about large groups of inhabitants in remote areas of Venezuela who call themselves Bare. All speak *Língua Geral* exclusively, while younger people prefer to speak Portuguese and Spanish. Amazingly enough, when one remaining fluent speaker of Bare—the late Candelário da Silva—was discovered near Cucui, some other *Língua Geral*-speaking Bares showed surprise; they sincerely had thought that *Língua Geral* was Bare, since it is now their language. Interestingly, *Língua Geral* is now called "Bare" in Tariana, which shows how "acculturated" Indians were identified with Bare by early Tarianas.

7. I do not know to what extent this is due to the closeness of these languages.

8. See Sorensen (1972 [1967]) and Grimes (1985) for how strictly Vaupes Indians evaluate knowledge of a language; only those who have a native-speaker-like proficiency would acknowledge that they actually "know" a language.

9. Little is known, as yet, about linguistic areas in South America. The best-known example of a tentative analysis of linguistic areas in Central and South America is found in Costenla Umaña (1991).

10. An amusing illustration of how vowel length is being lost in Tariana comes from the treatment of an original minimal pair for long vowels: *ka:hwi* 'be awake' (cf. Baniwa of Içana *ka:hwi* 'be awake') and *kahwi* 'manioc flour'. According to my teachers, Tariana speakers used to playfully wake up their friends by knocking on a wall and saying in Tucano: "*po'ka, po'ka!*" *Po'ka* means 'manioc flour', and thus the wordplay is based upon the loss of vowel length.

11. In word-initial and word-medial position, Baniwa of Içana *dz* and Kurripako *y* correspond to Tariana *ñ*, if the following or the preceding syllable contains a nasal consonant, e.g., Tariana *ñama*, Baniwa of Içana *dzama*, and Kurripako *yama* 'two'; Tariana *-ñami*, Baniwa of Içana *-dzami*, and Kurripako *-yami* 'to die, to be terminally ill'; and Tariana *pamuña*, Baniwa of Içana *pamudzua*, and Kurripako *pamuya* 'middle' (cf. also Tariana *ñamu* and Warekena of Xie *yama-du* 'evil spirit').

Tariana *y* corresponds to Baniwa of Içana *y* in other positions, e.g., Tariana and Baniwa of Içana *majiye* 'knife'. Tariana *y* corresponds to Baniwa of Içana and Kurripako *y* in loanwords from Língua Geral, e.g., Tariana and Baniwa of Içana *yaçana* 'a white person'; Tariana and Baniwa of Içana *yaçaki* 'caxiri, manioc wine'.

12. Note that Tariana *ama-ku* 'hammock' and its cognates in other North Arawak languages are the source for this lexical item in Indo-European languages (e.g., English *hammock*, French *hamac*); see Valenti (1986) on borrowings from Arawak languages into Indo-European languages.

13. According to Gomez-Imbert (forthcoming), Cubeo has undergone a similar change through influence from Baniwa of Içana in a contact situation. In Cubeo, animals are classified according to their shape.

14. An interesting instance of hypercorrection comes from one young fluent speaker of Tariana, Jovino Brito. He systematically suppressed the initial *d* in the postposition *daçipa* 'near, at' when it was preceded by a full noun phrase, following a principle of analogy, in which every word-initial *d* represents a third person singular nonfeminine prefix. Other speakers would correct him, in the following manner:

Juvino: *di-hñaweri-nipe açipa* (3SGNF-in-law-PL near) 'near his in-laws'

Others: *di-hñaweri-nipe açipa*

15. I also noticed a tendency to replace verbal root compounding with equivalent serial constructions. Verbal compounding in Tariana is due to East Tucanoan influence; a few serial constructions are found in all North Arawak languages. Speakers tried to avoid the use of *-sita* as an incorporated verb root, by replacing it with the same verb form in an aspectual serial verb construction, when transcribing texts or when asked to repeat a sentence. An example of such variation is as follows:

naha ñumuku na-ira-kahwi-pidena na-ira na-sita
they mash 3PL-drink-EARLY-PART 3PL-drink 3PL-finish

(or *na-ira-sita*) *nesa-nha-pidena*
3PL-drink-AFTER SS 3PL + go upstream-PROB-PART

'After they drank the mash, they finished drinking, they went upstream.'

When asked directly why they were doing so, they said that "it is better Tariana" not to use *-sita* as an enclitic.

16. There are several examples of Arawak influence on East Tucanoan languages. The existence of a series of aspirated stops and the two sibilants *s* and *tʃ* in Guanano, absent in other East Tucanoan languages, but present in the North Arawak languages Baniwa of Içana and Tariana, may be interpreted as the result of Arawak influence. Carapana (Metzger 1981:151) and Tatuyo (Elsa Gomez-Imbert p.c. 1995) have an attributive prefix *ka-* that displays a striking similarity to the relative-attributive prefix *ka-* in Tariana and Baniwa of Içana. The “foreignness” of this prefix in Carapana and Tatuyo is confirmed by the primarily suffixing character of East Tucanoan languages. An example of areal influences from Baniwa of Içana on the morphology of the Central Tucanoan language Cubeo in the Querarí region is described by Gomez-Imbert (forthcoming). The classifier system in Cubeo has been restructured in agreement with the Arawak pattern, in which animals are classified by their shape and form. Tanimuca-Retuamna (Retuarã), a West Tucanoan language spoken in Colombia, apparently lost its complicated classifier system under the areal influence of another North Arawak language, Yucuna, which has only gender opposition (Schauer and Schauer 1978; Strom 1992; Gomez-Imbert forthcoming).

17. As a result of extensive bilingualism, the Great Plains was beginning to develop into a linguistic area (or areas). However, there was not sufficient time depth and social stability in the late eighteenth and nineteenth centuries for a true area to emerge (Douglas Parks p.c. 1996).

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