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Arawak Linguistics and Max Schmidt's Account of Arawak Expansion

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1. Introduction

Although Max Schmidt's thesis focuses on the expansion of Arawak *cultures*, language consistently looms in the background of Schmidt's work as an important marker of cultural affinity and symptom of cultural influence. As a consequence, linguistics -- and linguistic classification in particular -- plays an important role in Schmidt's thesis. In this chapter I discuss the role played by linguistics in Schmidt's work; the status of the linguistic evidence he adduces to support his arguments in light of modern Arawak comparative linguistics and research on language contact; and directions for future research suggested by Schmidt's diffusionist hypothesis.

The foremost role played by Arawak linguistics in Schmidt's thesis is in identifying the Arawak peoples -- seen as a *cultural* grouping -- via their use of related languages. However, Schmidt sought to avoid the linguistic essentialism which threatens to result from reliance on linguistic classification alone, and his efforts to break his dependence on linguistic criteria in identifying Arawak peoples form an important thread in this work.

Language also surfaces explicitly when Schmidt adduces two linguistic observations in support of his diffusionist account of Arawak cultural expansion: 1) the size of the Arawak language family, and 2) the "uniformity" of the Arawak languages. Finally, several comments Schmidt makes reveal a protean theory of language shift in relation to cultural influence.

2. Linguistic Classification and the Delineation of the Arawak Peoples

In the opening pages of his thesis, Schmidt makes clear that linguistic classification underlies, however unsatisfactorily, the basic delineation of the Arawak peoples:

"...a more or less satisfactory orientation in the maze of innumerable small tribes in South America can only be achieved on a linguistic basis, but only insofar as this is a preliminary orientation. In order to bring about a really fundamental explanation of tribal relationships, methods other than those of linguistic comparisons must be applied as well." (p.7)

Schmidt's wariness of depending solely on linguistic classification stemmed from his understanding that languages, cultures, and peoples are not bound together as a Herderian whole, but each have potentially independent trajectories in time and space¹. In support of

¹ This point was also made at greater length by both Boas (1897) and Sapir (1921: pp 221-247). Note that in asserting the independence of language from culture, Schmidt diverges from the influential (and frequently racist) line of thought that linked linguistic features of American languages to the stage of mental and cultural development of their

this position, Schmidt cites the Xingu region, where linguistically Arawak, Carib, Jê, and Tupian groups, along with the linguistic isolate Trumai, share numerous cultural practices (Seki, 1999), and the “Río Negro” region (now more commonly referred to as the Içana-Vaupés region), where linguistically Tukano (M. Schmidt: Betoya) and Arawak groups share cultural practices and participate in an elaborate system of linguistic exogamy (Aikhenvald, 1999b; Stenzel, 2005).²

Despite his desire to distinguish Arawak culture-bearing peoples from peoples that speak Arawak languages, the criteria he develops for identifying Arawak cultures (see pp 103-105) are ultimately not sufficiently robust for him to break with his reliance on linguistic criteria. His failure to break from linguistic classification as his basic tool for identifying Arawak cultures is most obvious, in retrospect, in the case of the Arawán peoples of the Purús region (his “Purus tribes”³). Strikingly, Schmidt mentions these peoples precisely because they diverge culturally from the general Arawak culture that he identifies, but instead of concluding that the Arawán peoples were not significantly influenced by Arawaks, he remarks that the relatively modest role of agriculture among these groups

“can probably be explained by the fact that the Arawak cultures had impressed their languages, but not their economic form in its entirety upon this part of the population” (p.19)

All recent classifications (see below), agree that the Arawán languages were, in fact, formerly misclassified as Arawak (for details, see Dixon, 1999 and Dixon, 2004). What is striking, in light of Schmidt’s concerns about relying overmuch on linguistic classifications, is that in this particular case he lets (incorrect) linguistic classification trump the cultural evidence his materials presented.

In this context of his reliance on linguistic classification, the status of the Arawak comparative linguistics he relied upon and the subsequent developments in the field are important. We now review this issue; Aikhenvald (1999a) and Facundes (2002) also provide overviews of comparative Arawak linguistics.

Many early comparative works, such as Steinen (1886), on which Schmidt would have relied, Brinton (1891), and Goeje (1928: 210-214), delimited the Arawak family quite accurately, on the basis of relatively conservative assessments of cognates of both free forms and bound morphemes. Goeje’s only major error, for example, consisted of including the Arawán languages in the Arawak family.

Beginning with Rivet (1924), however, we see a trend towards creating more inclusive Arawakan groupings based on superficial lexical resemblances among short word lists (see Rowe (1954) for a trenchant critique of Rivet’s relaxed methodology). In addition to

speakers (see, e.g. Brinton 1891: p. 55).

² Speakers of Nadahup languages (a.k.a. Makú) are also participate in a marginalized role in this culture area.

³ Schmidt’s “Purus tribes” consist of speakers of Arawán languages, and the Ipuriná (a.k.a. Apurinã) people, who speak an Arawak language.

Arawán, Rivet included the Takanan and Uru-Puquina family (the latter a bogus grouping of the Uru-Chipaya family with Puquina -- see Adelaar and Muysken (2004: pp.350-375)), and subsequently, the Harakmbet languages (Rivet and Loukotka, 1952) in Arawakan. Loukotka (1968 [1935]), Mason (1950), and Noble (1965) present similar classifications, distinguished by omitting one or another of Rivet's extra families and sometimes adding a language or family.

By the 1950s-1970s, efforts to create ever more inclusive groupings via "long distance" genetic relationships became the deliberate goal of a number of then-influential comparativists such as Joseph Greenberg, Jorge Suárez, and Morris Swadesh, who sought to absorb small families or isolates into larger language groupings in the Americas. The Americas display considerably greater linguistic diversity than most other parts of the world (Nichols 1992), and many comparativists appear to have been guided by the intuition that we should expect to find a density of language families in the Americas more like that found in Europe, where it is much lower. The effort to form macro-groups was frequently accompanied by the abandonment of sound historical methods, and many of the resulting groupings, such as Amerind (Greenberg 1987), now serve as textbook examples of the dangers posed by abandoning those methods (Campbell 1997).

In addition to the now-acknowledged solidly Arawak languages, then, and those families grouped with them by previous classifiers such as Rivet, we find the Chapacuran family (see Aikhenvald and Dixon 1999b: pp.358-360; 370-377) included in "Arawakan" (Greenberg 1960). Arawakan is seen as a branch of a larger "macro-Arawakan" family that includes the Guahiboan languages (Aikhenvald and Dixon pp. 370-377) and several other small language families no longer believed to be related to Arawak at all. Macro-Arawakan in turn forms part of an even more inclusive "Equatorial" group that includes the Tupían and Jibaroan families, as well as several smaller language families (Greenberg 1987). Swadesh (1959) and Suárez (1974) reached similar conclusions in forming groupings parallel to Greenberg's macro-Arawakan. It should be noted that even the relatively small Arawakan grouping is presently seen by all Arawak specialists as unfounded (Aikhenvald 1999, Campbell 1997, Payne 1991, Ramirez 2001).

The subsequent conservative reconsideration of both the macro-groupings of the 50s - 70s and earlier classifications can be dated to the work of Kaufman (1990) and especially, Payne (1991), coinciding with increased availability of high-quality linguistic data based on prolonged fieldwork. The consensus that has emerged as a result is that there is a large group of undoubted Arawak affiliation, referred to as either *Maipurean* (a.k.a. Maipuran) or *Arawak*. The term *Arawakan* is now most commonly used to refer to the speculative macro-groupings mentioned above.⁴

The fact that Schmidt's work coincided with the earliest, relatively conservative, phase of Arawak comparative linguistics, and preceded the subsequent tendency towards unfounded inclusive groupings, prevented him from being led far astray by the feverish classifications of that period. However, in at least one case, advances in linguistic

⁴ Note that M. Schmidt uses both the terms "Arawak" and "Arawakan" to refer to the group now denoted by "Arawak".

classification resolves ethnographic incongruities faced by Schmidt, stemming from incorrect linguistic classification, namely, the issue of the the “Purús tribes” mentioned above, whose agricultural practices do not conform to that generally found among Arawall peoples. We now know, however, that the groups in question principally belong to the Arawán, not Arawak, family.⁵

Although a consensus has emerged on the membership of the Arawak family, the internal classification⁶ of the family remains unclear in many respects. A number of competing classifications have emerged in recent years (Aikhenvald,1999; Campbell,1997; Kaufman,1994; Payne,1991; Ramirez,2001). Some are based on lexicostatistical methods⁷ (e.g. Payne 1991, Ramirez 2001) and others on areal-geographical methods⁸ (e.g. Aikhenvald 1999). None of these classifications are based on the acknowledged gold standard for comparative linguistics, the systematic reconstruction of protolanguages (see, e.g. Campbell 199 for an introduction to the historical method), so definitive internal classification awaits the necessary painstaking work.

3. Linguistic Evidence and the Diffusion Hypothesis

Schmidt cites two pieces of linguistic evidence in favor of his diffusionist account of the Arawak expansion: first, the significant diversification of the Arawak languages, and second, the “uniformity” of the Arawak languages.

Schmidt attributes the sheer number of Arawak languages to linguistic diversification driven by numerous instances of languages contact:

“The multiplicity of the Arawakan dialects can thus be explained from the connection between Arawak languages and various other languages.” (p. 82)

⁵ Note that Hill and Santos-Granero (2002: p.15) find a similar resolution to the incongruity posed by the practice of endo-warfare (which is rare among Arawak peoples) among the Culina (a.k.a Madija), who speak an Arawán language that was formerly misclassified as Arawak.

⁶ That is, the delineation of subgroups of relatively closely-related languages within Arawak.

⁷ Lexicostatistical methods of classification are based on the idea that percentages of cognates found in a given word list for two languages are diagnostic of the relatedness of the languages. This is not, in general, true, since words are replaced for a variety of reasons, and at non-uniform rates (Campbell 1999). In addition, the choice of the set of lexical items to be compared affects the classification (compare, for example, the divergent internal classifications of Arawak obtained by Ramirez (2001) and Payne (1991) on the basis of different comparison sets). Nevertheless, many linguists consider lexicostatistics a viable preliminary means to obtain a rough idea of subgroupings within a group of related languages.

⁸ Areal-geographical methods are based on the idea that languages that display similarities, and which are located closely to one another, are more closely related to each other than more distant ones.

However, a parent language may differentiate into a number of daughter languages for several different reasons: geographic separation, socio-political divergence, and language contact (Dixon, 1997). The size of the language family itself tells us nothing about the specific processes of differentiation that yielded the group of related languages. And significantly, large language families may result entirely from migration, with no role played by language contact, as in the case, for example, of the Oceanic branch of Austronesian, with some 500 members (Dixon, 1997: pp.86-7). Nor does contact between a given language and numerous other ones, necessarily lead to significant linguistic differentiation in the former language. Consider, for example, the case of Spanish in the Americas, which has been in contact with hundreds of indigenous languages for over 500 years. Despite this significant contact, however, the American dialects of Spanish remain mutually intelligible with European Castilian Spanish.⁹

There is thus nothing about the large number of languages that comprise the Arawak family *per se* that lends support to Schmidt's assertion that this differentiation arose through language contact. Such diversity could equally have arisen through the migration of Arawak peoples -- the very thesis that Schmidt opposes -- or through a mixture of migration and language contact. At the same time, however, our current understanding of Arawak historical linguistics does not rule out the possibility that language contact may have played an important role in the differentiation of Arawak languages. In the next section I discuss what kinds of evidence linguists could search for to evaluate Schmidt's hypothesis.

The second piece of linguistic evidence that Schmidt cites to support his diffusionist hypothesis concerns the putative "uniformity" of the Arawak languages¹⁰:

"Just as through the continuous associations of the Arawak cultures with external tribal elements is commonly accepted, there is in turn the tendency towards uniformity among the diverse dialects through the constant sequence of repeated cultural waves flowing from the centres of these cultures." p.106

It is not clear how to understand Schmidt's reference to the "tendency towards uniformity among the diverse dialects," since he does not expand on this point. Given the state of Arawak comparative linguistics at the time that Schmidt wrote, however, it is likely that Schmidt was referring to certain morphemes that have obvious cognates¹¹ in most

⁹ Of course, mixed languages such as the Spanish-Quechua mixed language, *Media Lengua* (Muysken, 1994: pp. 207-211), have arisen, and varieties of regional Spanish show influences of local languages. The socio-political dominance of Spanish speakers over speakers of indigenous languages, however, has meant that Spanish has exerted much greater influence on indigenous languages than the reverse.

¹⁰ Note that Schmidt frequently uses the term "Arawak(an) dialect" to refer to what linguists would now call an Arawak *language*. This usage may reflect Schmidt's belief regarding the similarity of the languages in question.

¹¹ Two words in separate languages are considered *cognates* if they both developed directly from a common source in the protolanguage from which the two separate languages descended.

Arawak languages, and which served as early, if not always entirely reliable, indicators of Arawak affiliation¹². Chief among them are the first- and second-person markers, *nu-/no-* and *pi-*, and the negation *ma-*.¹³ The presence of cognates such as these, however, are no more an indication of “uniformity” in Arawak than are the presence of cognates in any language family. In any event, no Arawak specialists at present comment on any “uniformity” among Arawak languages (but see comments below on linguistic areas).

4. Linguistic Entailments of Arawak Cultural Diffusion

Although the linguistic evidence Schmidt adduced to support his theory of spreading Arawak cultural hegemony is not compelling, linguistics may nevertheless be an important source of information for evaluating both Schmidt’s particular theory and affine ones (Hill and Santos Granero 2002). In particular, the study of language contact phenomena may provide significant insight into the interactions of Amazonian people prior to the European invasion.

Because interaction between peoples speaking different languages frequently leaves traces, sometimes subtle, sometimes obvious, on the lexicons and grammars of the languages involved, the study of contact-induced linguistic change can serve as a means of identifying past contacts between speakers of different languages. Not only can such research identify the occurrence of such contact, but it can yield insights into the nature of that contact. For example, language-contact situations in which one group is dominant over another typically result in a overwhelmingly one-way transferal of linguistic material and features from the language of the dominant group to the language of the dominated group. Conversely, long-term interaction between groups in which no single group occupies a dominant position results in the creation of linguistic areas, where certain grammatical features come to be widely shared among a group of genetically unrelated languages (cf. Dixon’s (1999) *equilibrium situation*). Significantly, the kinds of grammatical organization that come to be shared in these two kinds of language contact situations are different (see Aikhenvald (2002: 9-13, 265-279) for a discussion of these issues), allowing linguists to infer some broad characteristics of the nature of the interaction that led to these contact-induced changes.

Both types of language contact effects are exemplified in the grammar of Tariana, an Arawak languages spoken in the Vaupés region of northwestern Brazil (Aikhenvald 2002). Prior to the early 20th century, this region formed a linguistic area, in which a number of grammatical systems came to be shared by languages of the Tucanoan, Arawak, and Nadahup (a.k.a. Makú) families (Aikhenvald 2002, Epps 2005). These included evidential systems, organization of pronominal and nominal systems, and

¹² Another possibility is that Schmidt was influenced by the line of thought, prominent in the 19th century (see, e.g. Duponceau, 1838; Brinton, 1891), but now thoroughly discredited, that all American languages had profoundly similar grammars, despite their lexical differences (see Campbell, 1997: 27-56 *passim*, for discussion).

¹³ The salience of these cognates for M. Schmidt is evident in his comment on the Arawak affiliation of the Parecí “whose language ... belongs to the Arawak languages with the typical pronominal prefix ‘nu.’” (p. 6).

syntactic structures. In the course of the 20th century, however, Salesian missionaries heavily pressed the use of Tucano as a *lingua franca* in the region, leading to a situation in which Tucano speakers were socially and politically dominant over the speakers of other languages in the area. With this change, the influence of Tucano on Tariana changed, with Tariana speakers employing *calques* (word-by-word or morpheme-by-morpheme translations) of Tucano morphological and syntactic structures.

In either case, the particular nature of borrowed or diffused linguistic material may provide insight into the relationship between the two groups. The Arawak-speaking Matsigenkas of the Manú region, for example, retain lexical items from Quechua that indicate trade relationships between the two groups and the influence of Quechua religious concepts.

Another indication of particularly intense language contact is the emergence of mixed languages, which combine the lexicon of one language with the grammar of another. A linguistic consequence we might expect from Schmidt's theory is an abundance of mixed languages with either an Arawak lexicon or an Arawak grammatical substrate. At this point, the only known example of such a phenomenon is the Iñeri (Island Carib) men's register (Hoff, 1994), a register used to address men, in which certain Arawak lexical items were replaced with their mainland Carib equivalents. The precise social process by which this mixed speech register arose remains a point of contention, in particular, whether Carib arrival in Arawak areas was peaceful migration or violent conquest (compare, e.g., Hoff, 1994 and Whitehead, 2002).

The present dearth of identified Arawak-influenced mixed languages should not be taken as evidence for their absence, however, as comparative Arawak linguistic studies are still in their infancy. Consider, for example, that despite the relatively advanced state of Tupían studies, it was only recently that Omagua and Cocama, two closely-related languages spoken in Peru and Brazil, were reclassified as having a non-genetic relationship¹⁴ to Tupí-Guaraní, the family in which they were formerly classified (Cabral, 1995). According to Cabral, the lexicons of Omagua and Cocama are largely of Tupí-Guaraní origin, but their grammars are not. Cabral even suggests that the substrate language, which lent its grammar to the new mixed languages, may have been an Arawak one.¹⁵ The recent discovery of the non-genetic origin of Cocama and Omagua highlights the possibility that languages which have been assigned to a given family on lexical grounds may prove, upon closer analysis, to have a non-genetic relationship to that language family, indicative of a prior context of significant cultural and linguistic contact.

¹⁴ A language is said to have a non-genetic origin when the grammar and lexicon of the language are not diachronically related to a single parent language.

¹⁵ Cabral provides no significant evidence for an Arawak substrate, however. Christine Beier, Edinson Huamancayo, and I have collected a substantial quantity of linguistic data from Arnaldo Huanaquiri, one of the last speakers of Omagua. This data shows that the typological profile of Omagua is quite different from that of Arawak languages, which undermines Cabral's Arawak substrate hypothesis. For example, while Arawak languages are generally head-marking and polysynthetic (Aikhenvald 1999, p.80), Omagua is largely dependent-marking and relatively isolating.

Wholesale language shift is indicative of particularly intense contact, and of profound socio-political dominance of one group by another (see, e.g. Dorian, 1998). Curiously, most of the instances of language shift that Schmidt cites involve the displacement of Arawak languages by other languages (e.g. Tariana losing ground to Tucano, p. 15, 60; Káua losing ground to Kobeua, p. 14, 86; Chané losing ground to Chiriguano, p. 14), which undermines his thesis of Arawak cultural superiority. Schmidt remarks on the incongruity of Arawak language loss in the face of the superiority he posits for Arawak culture (p. 15), and suggests that adoption of foreign languages is an Arawak expansionist strategy (see also, p.61):

This [the “repression of Arawak dialects”] is far more the case of foreign languages being learned and employed specifically for the purpose of expanding the sphere of power over foreign influences. (p. 15)

At the same time, however, in the one case he cites of another group adopting an Arawak language, he remarks:

The Yurupary-Tapuyo seem to be in a dependency relationship upon the Tariana as well, for which reason they also assumed their language after a time. (p. 59)

For Schmidt, then, it seems that both the contraction and expansion of Arawak languages support the thesis of Arawak cultural expansion and cultural superiority. While it is not possible to entirely rule out Schmidt’s expansionist strategy explanation for the cases of Arawak language loss he cites, these would certainly run counter to linguists’ understanding of how language loss typically comes about (Dorian 1998). In short, the loss of Arawak languages in cases like those cited by Schmidt points to the dominance of non-Arawak groups over Arawak ones. In any event, the study of language shift in pre-Conquest Amazonia is another potential source for understanding the cultural history of that period.

5. Conclusion

Schmidt’s thesis is rich in implications for Amazonian linguistics, which it turn provides a unique set of tools for understanding the cultural history of Amazonia. Accurate linguistic classification is one such tool, as is the study of language contact phenomena. Significant results regarding large-scale language contact phenomena in the Amazon Basin will depend on sustained research programs of historical reconstruction coupled with attention to areal linguistics, all based on detailed fieldwork on the region’s numerous under-documented languages. Schmidt’s work thus points to exciting prospects for cross-disciplinary work on Amazonian history, uniting linguistics with archeology and cultural anthropology (see Hill and Santos-Granero (2002) for a good example of cross-disciplinary explorations of this type). In an era in which the anthropological subdisciplines are diverging, threatening the discipline’s holistic traditions, a collaborative research of this sort can provide a compelling example of what may be

gained by maintaining a vital dialogue across subdisciplines.

References Cited

Aikhenvald, Alexandra. 1999a. The Arawak language family. In R.M.W. Dixon and A. Aikhenvald (Eds.), *The Amazonian Languages*, Cambridge University Press. pp. 385-416. pp. 65-106.

Aikhenvald, Alexandra. 1999b. Areal diffusion and language contact in the Içana-Vaupés basin, north-west Amazonia. In R.M.W. Dixon and A. Aikhenvald (Eds.), *The Amazonian Languages*, Cambridge University Press. pp. 385-416.

Aikhenvald, Alexandra. 2002. *Language contact in Amazonia*. Oxford University Press.

Brinton, Daniel. 1891. *The American Race*. David McKay.

Cabral, Ana Suely. 1995. Contact induced language change in the western Amazon: the non-genetic origin of the Kokama language. PhD dissertation, University of Pittsburgh.

Campbell, Lyle. 1997. *American Indian languages: The historical linguistics of Native America*. Oxford University Press.

Campbell, Lyle. 1999. *Historical linguistics: An introduction*. MIT Press.

Dixon, R.M.W. 1999. Arawá. In R.M.W. Dixon and A. Aikhenvald (Eds.), *The Amazonian Languages*, pp. 292-306. Cambridge University Press.

Dixon, R.M.W. 2004. Proto-Arawá phonology. *Anthropological Linguistics*, 46(1), 1-83.

Boas, Franz. 1897. Review of Paul Ehrenreich "Anthropologische Studien Ueber Die Urienwohner Brasiliens," 1897. *Science*, 6: pp. 880-883.

Dorian, Nancy. 1998. Western language ideologies and small-language prospects. In L. Grenoble and L. Whaley (Eds.), *Endangered Languages*. pp.3-21. Cambridge University Press.

Duponceau, Peter Stephen. 1838. *Mémoire sur le syst`eme grammatical des langues de quelques nations indiennes de l'Amérique du Nord*, ouvrage qui, `a la séance publique annuelle de l'Institut Royal de France, le 2 de mai 1835, a remporté le prix fondé par M. le comte de Volney. Paris: Pihan de la Forest.

Epps, Patience. 2005. *A Grammar of Hup*. PhD dissertation, University of Virginia.

Facundes, Sidney. 2002. Historical linguistics and its contribution to improving the knowledge of Arawak. In J. Hill and F. Santos-Granero (Eds.), *Comparative Arawakan histories: Rethinking language family and culture area*. University of Illinois Press. pp.

74-96.

Goeje, Claudius de. 1928. The Arawak language of Guiana. Amsterdam Koninklijke Akademie van Wetenschappen.

Greenberg, Joseph. 1956. The General Classification of Central and South American languages. In A. Wallace (Ed.), *Men and cultures: Men and cultures: selected papers of the Fifth International Congress of Anthropological and Ethnological Sciences*. Philadelphia, September 1-9, 1956. University of Pennsylvania Press. pp. 791-794.

Greenberg, Joseph. 1987. *Language in the Americas*. Stanford University Press.

Hill, Jonathon and Fernando Santos-Granero. 2002. *Comparative Arawakan histories: Rethinking language family and culture area*. University of Illinois Press.

Hoff, Berend. 1994. Island Carib, an Arawakan language which incorporated a lexical register of Carib origin, used to address men. In P. Bakker and M Mous (Eds.), *Mixed Languages*. Uitgrave Institute for Functional Research into Language and Language Use. pp 161-168.

Loukotka, Cestmir. 1968 [1935]. *Classification of the Languages of South America*. UCLA Latin American Center.

Mason, J. Alden. 1950. The languages of South American Indians. *Handbook of South American Indians*. 6: 157-317. *Bulletin of the Bureau of American Ethnology*, 143.

Nichols, Johanna. 1992. *Linguistic diversity in time and space*. University of Chicago Press.

Noble, G. Kingsley. 1965. *Proto-Arawakan and its descendants*. Mouton & Co.

Payne, David. 1991. A classification of Maipuran (Arawakan) languages based on shared lexical retentions. In D. Derbyshire and G. Pullum (Eds.), *Handbook of Amazonian Languages*, Mouton de Gruyter, Vol. 3, pp. 355-500.

Ramirez, Henri. 2001. *Línguas Arawak da Amazônia setentrional: Comparação e descrição*. Editora da Universidade do Amazonas

Rivet, Paul. 1924. *Langues de l'Amérique du Sud et des Antilles*. In A. Meillet and M. Cohen (Eds.), *Les Langues du Monde*. pp. 639-712.

Rivet, Paul and Cestmir Loukotka. 1952. *Langues de l'Amérique du Sud et des Antilles*. In A. Meillet and M. Cohen (Eds.), *Les Langues du Monde* (nouvelle edition).

Rowe, John. 1954. Linguistic classification problems in South America. In M. Emeneau (Ed.), *Papers from the symposium on American Indian linguistics*, pp. 10-26. University

of California Press.

Sapir, Edward. 1921. *Language: An introduction to the study of speech*. Harcourt, Brace, and Company,

Seki, Lucy. 1999. The Upper Xingu as an incipient linguistic area. In R.M.W. Dixon and A. Aikhenvald (Eds.), *The Amazonian Languages*, Cambridge University Press. pp. 417-430.

Steinen, Karl von den. 1886. *Durch Zentral-Brasilien, Expedition zur Esforschung des Schingu im Jahre 1884*. Leipzig: F.A. Brokhaus.

Stenzel, Kristine. 2005. *Multilingualism in the Northwest Amazon, Revisited*. Proceedings of the Second Conference on the Indigenous Languages of Latin America, University of Texas at Austin. URL

Swadesh, Morris. 1959. *Mapas de clasificación lingüística de México y las Américas*. UNAM.

Suárez, Jorge. 1974. South American Indian languages. *Encyclopaedia Britannica*, 15th edition, *Macropaedia* 17, pp. 105-112.

Whitehead, Neil. 2002. Arawak linguistics and cultural identity through time: contact, colonialism, and creolization. In J. Hill and F. Santos-Granero (Eds.), *Comparative Arawakan histories: Rethinking language family and culture area in Amazonia*.