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Charles Wagley on changes in Tupí-Guaraní kinship classifications

Transformações nas classificações de parentesco Tupi-Guarani segundo Charles Wagley

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Abstract: Charles Wagley contributed significantly to the ethnographic study of culture and society in Brazil. In addition to his well-known work on both rural and urban Brazilian populations, Wagley was a pioneering ethnographer of indigenous societies in Brazil, especially the Tapirapé and Tenetehara, associated with the Tupí-Guaraní language family. In comparing these two societies specifically, Wagley was most interested in their kinship systems, especially the types of kinship or relationship terminology that these exhibited. In both cases, he found that what had once been probably classificatory, bifurcate-merging terminologies seem to have developed into more or less bifurcate-collateral (or Sudanese-like) terminologies, perhaps partly as a result of contact and depopulation. Recent research on kinship nomenclature and salience of relationship terms among the Ka'apor people, also speakers of a Tupí-Guaraní language, corroborates Wagley's original insights and indicates their relevance to contemporary ethnography.

Keywords: Relationship terms. Tupí-Guaraní. Amazonia. Ethnography.

Resumo: Charles Wagley contribuiu de maneira significativa para o estudo etnográfico da cultura e sociedade no Brasil. Além de seu conhecido trabalho sobre as populações rurais e urbanas brasileiras, Wagley foi um etnógrafo pioneiro das sociedades indígenas no Brasil, especialmente os Tapirapé e Tenetehara, associados à família linguística Tupi-Guarani. Ao comparar especificamente essas duas sociedades, Wagley estava interessado, sobretudo, nos seus sistemas de parentesco, especialmente nos tipos de parentesco ou na terminologia para relacionamentos que elas apresentavam. Em ambos os casos, ele descobriu que, provavelmente, terminologias classificatórias com fusão bifurcada parecem ter se transformado, mais ou menos, em terminologias bifurcadas colaterais (do tipo Sudanês), talvez parcialmente como resultado do contato e despovoamento. Pesquisa recente sobre a nomenclatura de parentesco e relevância de termos para relacionamento entre os Ka'apor, também falantes de uma língua Tupi-Guarani, corrobora as reflexões originais de Wagley e evidencia a importância delas para a etnografia contemporânea.

Palavras-chave: Termos para relacionamento. Tupi-Guarani. Amazônia. Etnografia.

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Charles Wagley (1913-1991) bequeathed us a lasting legacy of Brazilianist, indigenist, and Latin Americanist research and teaching. He was appreciated in his lifetime with at least two *Festschriften* (Margolis and Carter, 1979; Magee and Wilson, 1990), and here one appositely honors him again in this distinguished journal, one hundred years after Wagley's birth, and a few years more after the launching of the original series of the "Boletim do Museu Paraense de Historia Natural e Ethnographia" (1894). I can think of no better venue for the present tribute than this one.

Wagley's pedagogy and mentorship were, of course, profound; he alone supervised forty-six dissertations (Harris, 1990, p. 3). As a nineteen-year old undergraduate honors thesis student in 1974, I came under his advisement. I distinctly recall Professor Wagley's reply to my question concerning the purpose of an anthropologist's profession: "Originally, it was to train more anthropologists". That concept of training drew directly upon his own research, especially his fieldwork, the *sine qua non* of Franz Boas' approach to cultural anthropology. Wagley seemed to be immune from concerns over academic celebrity; he was an empiricist as was his teacher Boas. Wagley customarily told visitors to his office at the University of Florida that he was "not known as a theorist". He was instead interested in knowing and exploring ethnographic realities where few had ever trodden before. That of course he accomplished and not without daring, aplomb, and some naiveté mixed with instinctive perspicacity. In brief, and *par excellence*, Charles Wagley was an ethnographic pioneer.

ETHNOGRAPHY AS THEORY AND METHOD

Some irony can be found in Wagley's oft-repeated *caveat* about "not being known as a theorist". Likewise, he could describe exquisitely the failure of rubber plantations in Amazonia, as due to a fungal blight, but before he was finished with his instructive summary, he would interject: "You know, I'm not a botanist". As with most Amazonianists, Wagley had to become familiar with knowledge outside the ken of classroom lectures and anthropology texts; he

also had his field training, and together with his reading and note-taking, he discovered novel features and arrangements in society and culture. In fact, the irony in the disclaimer is that Wagley's ethnographic work actually instantiates concepts and analysis prevalent in twentieth century American anthropology, especially, if not only, with reference to the domain of kinship.

Kinship is coming back in American anthropology; a perusal of abstracts from the 2012 Annual Meeting of the American Anthropological Association in San Francisco readily shows this. In 2013, Charles Wagley's centennial, it can be further illuminating to discern the American engagement with kinship in the early to mid-twentieth century by focusing on Wagley's contribution to the study of terminologies, specifically those of Tupí-Guaraní peoples of Greater Amazonia, where he did fieldwork. That contribution represents empiricist ethnography on the eve of World War II, itself a watershed event in American anthropology, thanks in part to the Servicemen's Readjustment Act of 1944, known as the GI Bill. It financed the training of a significant segment of the succeeding generation of American anthropologists in the 1950s and 1960s (Balée, 2009; Eggan, 1963). Wagley, though not too old for combat duty, and fairly close in age to these veterans, taught and mentored many of them at Columbia University. He taught them kinship, among other things in his repertoire of knowledge acquired both in the field and in the classroom. He further instructed them on how to diagnose kinship terminologies within a nexus of classification schemes then current.

TUPINOLOGY IN THE BACKGROUND

Wagley's work on Tupí-Guaraní kinship was eminently well suited to the larger project detectable in his life's oeuvre, itself distinctive, with its own coherent signature. A propos of placing this work in perspective, the context of anthropological and sociological erudition in Brazil during the decade before World War II figures significantly. That erudition was partly rooted in embracing a concept

of Brazil's distinctiveness as a nation and culture, or rather what Wagley would later call an "anthropological laboratory" (Wagley, 1971).

Wagley's familiarity with kinship classifications in the field was coeval with that of his French colleague, Claude Lévi-Strauss (1908-2009). Wagley's initial field research among the Tapirapé consisted of more than fifteen months from 1939-1940 (Wagley, 1977, p. ix); Lévi-Strauss made several brief forays to diverse indigenous Brazilian groups after 1935, including a visit to a small Kagwahyv group, speakers of a Tupí-Guaraní tongue, in the western Amazon, in 1938 (Lévi-Strauss, 1992, p. 338-346). On the anthropological subject of kinship, both Lévi-Strauss and Wagley had a common mentor in Robert Lowie (1883-1957), even if he did not teach them directly or in any classes, but rather through correspondence and conversation. Wagley (1977, p. 96) uses Lowie's terminology in reference to the Tapirapé kinship system and Lévi-Strauss (1969, p. xxvi) not only thanked Lowie for "encouragement" in the original preface to "The Elementary Structures of Kinship", he indicates he was indeed persuaded to pursue anthropology as a profession upon reading Lowie's "Primitive Society". Wagley's field discoveries were not isolated in an idiosyncratic void, but were rather constitutive and illustrative of an underlying, grander project of understanding how people name and classify people, especially those to whom they believe themselves most closely associated, either by action or substance or both.

Wagley carried out two major ethnographic projects with Tupí-Guaraní speaking groups, the Tapirapé of Central Brazil and the Tenetehara of the northeastern edge of the lower Amazon in Maranhão. The Tapirapé research was initially carried out in 1939-1940; the Tenetehara work took place in collaboration with Wagley's first PhD student, Eduardo Galvão, in 1945-1946. The first research was not fully published as a stand-alone ethnography until 1977, almost forty years after the initial work had been completed; the second was published first in English in

1949 (Wagley and Galvão, 1949), then translated, and completed with additions, in Portuguese in 1955 (Wagley and Galvão, 1961). Wagley's later ethnographic forays with non-indigenous communities would soon become well-respected studies of Amazonian peasants (or *caboclos*) and of race and class in Northeastern Brazil; these projects trained a substantial cohort of influential anthropologists from Brazil and the United States (US).

In these later extra-indigenist contexts, Wagley found traces of native language and culture, derived from shared history and contacts between Tupí-Guaraní speaking peoples and the emerging, modern society of Brazil. Acknowledgement of a Tupian past is an indispensable part of the heritage of the country, dating from colonial times and remains remarkably alive in Brazilian Portuguese. One finds Tupí etymologies in toponyms (such as *Ipanema*, or "bad luck beach"), terms for flora and fauna (such as *mandioca* and *maracajá*), and many other terms and concepts in Brazilian Afro-Indigenous religion and folklore, such as *pajelança* and *capoeira*. Wagley was the first anthropologist who was both an indigenist and a Brazilianist; Galvão was probably the second.

Wagley's indigenism was not divorced from his Brazilianist legacy – and he is a widely acknowledged founder of Brazilianist studies in the US (Chernela, 2002, p. 233). That is because Tupí, as language, culture, and object of study, constitutes a single, continuing motif in Brazilianist research, at least since *Tupinologia* and its fascination with *Língua Geral* in the nineteenth century (e.g., Sampaio, 1987 [1901]). *Antropofagia*, "Cannibalism", was a nationalistic, modernist art and literature movement in early twentieth century Brazil that borrowed from Oswald de Andrade's poem, "O Manifesto Antropófago" (1928), the famous rallying cry: "Tupy or not Tupy: that is the question" (Andrade, 1928, p. 3). This Tupinological fascination in Brazil has parallels with nativist and nationalist tendencies elsewhere in Latin America, such as the teaching of Nahuatl in nineteenth century Mexican schools, though the Tupian legacy of Brazil lacks the monumental architecture that Mexico affords to Aztec archaeological

remains (e.g., Smith, 2012)¹. Wagley (1971, p. 250-253) discussed the phenomenon of Indianism, or Tupinology, in “An Introduction to Brazil”. Wagley’s own work was pioneering in bringing the most current research methodologies of social anthropology to bear on extant Tupian cultures and societies of the Brazilian interior.

Wagley was a complete indigenist: not only did he carry out major ethnographic work with more than one group, but one of the two Tupian groups he studied – the Tapirapé – exhibited distinctive influences of Gê-speaking peoples, such as ceremonial moieties, a men’s house, and a circular village plan. Wagley’s research in Brazil had been encouraged by Columbia professor Ralph Linton (1893-1953), whose interest was in acculturation generally. It should be pointed out that Wagley (1968, p. 17) had also been influenced by Robert Redfield (1897-1958), the University of Chicago social anthropologist, especially by his concept of the community (Redfield, 1941). Redfield, along with Wagley, was one of the first true professional North American social anthropologists to do research in Latin America. Redfield, who was not a Columbia student, is for that reason somewhat of an exception among US anthropologists doing ethnography in Latin America at the time (Adams, 1999, p. 323). Redfield worked in Tepotzlán, Mexico, in the 1920s, and published a monograph on this research in 1930; Wagley worked in two communities in Guatemala in 1937, and that work would be published as a Memoir of the American Anthropological Association (Wagley, 1941). Wagley’s cohort of researchers from the US working with indigenous groups included Irving Goldman (Cubeo) and Jules Henry (Kaingang), both of whom were also Columbia students who had trained under the general tutelage of Boas (Chernela, 2002, p. 234). Both Redfield’s and Wagley’s research projects were community studies, with the community, as Conrad Arensberg (1910-1997) (1961) would put it succinctly and definitively for that

generation of scholarship, held to be both “object and sample”. Such concerns did not materialize in Wagley’s indigenous work in Brazil – these were people living in villages in the forests and savannas, not town folk. Yet Wagley did have methodological emendations to make to the community study method a few years later when he headed a team of researchers in Bahia, explicitly employing terms of quantitative and qualitative research in that work (Wagley and Azevedo, 1951). In light of this work, it is difficult to not consider Wagley a theorist and methodologist, despite his disclaimer.

Wagley’s work in Brazil came after his Guatemala research, partly under the administrative patronage of Heloisa Alberto Torres of the Museu Nacional, in Rio de Janeiro, who was encouraging North American anthropologists to undertake research in Brazil. Indeed, the Museu Nacional was the first site of three and four-field anthropology in Brazil, dating from the time of Edgar Roquette-Pinto in the early twentieth century, before the discipline fragmented in Brazil as it also did in Europe (Balée, 2009). The Museu Nacional and Columbia University entertained an informal agreement, based on exchanges between Torres and Boas (Wagley, 1977, p. 6). Wagley (1977, p. 22), with Linton’s encouragement, was initially interested in investigating the acculturation of the Tapirapé, who in turn had been first recommended to him by Tupí-Guaraní specialist Alfred Métraux (Wagley, 1977, p. 4). Linton’s concerns were similar to Redfield’s, and indeed, they had coauthored, along with Melville Herskovits, a famous memorandum on acculturation (Redfield *et al.*, 1936).

INDIGENOUS DEMOGRAPHIC POLITICS

The Tapirapé in 1939 were facing one of the most significant challenges of a contact situation: massive depopulation due to introduced disease, which had ravaged the population since their earliest known contact in 1911. The acculturation study

¹ Though this ‘lack’ of monumentalism may be an artifact of both raw materials and historical perception: if Wagley had lived, he would have been fascinated by the earthwork geoglyphs of Acre (e.g., Schaan, 2011), which began to come to light only recently.

was largely given up in favor of empirically careful and skilled ethnography, to document what seemed to be a genuinely disappearing culture. Wagley's contribution to research on indigenous Amazonia, however, was not all descriptive: he was from the start interested in comparison at the level of Tupí-Guaraní language, culture, and society. H. Russell Bernard (1994, p. 159) noted that Wagley became "one of our discipline's most accomplished ethnographers". Marvin Harris (1990, p. 2) aptly considered Wagley's ethnography (1977) of the Tapirapé, "Welcome of Tears", a "masterpiece". And while acknowledging Wagley's major ethnographic contribution to Amazonianist research, the Tupí-Guaraní specialist, Eduardo Viveiros de Castro (1986, p. 91), also esteemed the comparative potential of the monograph on the Tapirapé in particular: "'Welcome of Tears' is perhaps the best available description of a Tupí-Guaraní society, supplying substantial material for comparative analysis at the highest level of abstraction"². The work is not only description – theory concerning how people interrelate with and classify each other is embedded in the work, however subtly.

In fact, Wagley had early noted "many patterns and institutions common to most Tupí-speaking tribes" (Wagley, 1951, p. 96). Looking at patterns, as well as institutions, renders it difficult to be atheoretical as an ethnographer. In Wagley's comparative study of cultural influences on population size of the Tapirapé and Tenetehara, he discussed differential ability to rebound from devastating population loss. These findings were pioneering and influential, for they preceded and supplied a basis for the theoretical discussion of the dissociative effects of contact on indigenous Amazonian groups (Ribeiro, 1956) and inferences of higher Amazonian populations in the past (e.g., Denevan, 1992, p. 5).

One of Wagley's most significant findings, which has yet to be proven wrong, is that individual societies

have population 'polices', what Marvin Harris (1980, p. 66) then labeled "modes of reproduction" of the societal infrastructure. And though his work is informed by things exterior to culture – meaning *a priori* that his work is theoretical on questions of cause and effect – Wagley (1951, p. 100) was definitely not an environmental determinist, unlike many Amazonianist colleagues of his generation; he specifically wrote: "Population control among the Tapirapé seems not to result from a direct limitation imposed by food supply but from culturally derived values (...)". The Tapirapé controlled population growth by combining infanticide with a rule on the number of living children a woman could have, among other related rules. These limits, however, continued even when they had become nonfunctional, *i.e.*, after the Tapirapé had suffered rapid and drastic consequences of Old World diseases and depopulation in the first decades of the twentieth century³. The Tapirapé went from a population of around 1,000 in 1900 to fewer than 100 persons in 1947 (Wagley, 1951), then 55 in 1957 and 79 in 1966 (Wagley, 1977, p. 45). These population declines – with devastating multiple losses of real, close relatives – could have influenced Tapirapé classification of people, terminologically, as objects of relationships (Wagley, 1977, p. 98). The Tapirapé were about 80 in 1968 (Shapiro, 1968, p. 1). Numbers began increasing in the 1970s (Wagley, 1977, p. 45). As of 2010, they were 655 (Toral, 2010). From the population data, Wagley determined that social groups, such as men's age grades, ceremonial moieties, and feast groups, could not function properly, due to population losses. They could not even maintain matrilineal extended families (Wagley, 1977, p. 98; Shapiro, 1968, p. 15). The structural disorganization of the family is related to Wagley's second comparative study of Tupí-Guaraní ethnology, kinship terminology and social structure.

² "'Welcome of Tears' é talvez a melhor descrição disponível de uma sociedade Tupi-Guarani, oferecendo amplo material para análises comparativas de maior nível de abstração".

³ By that time the Tenetehara, by contrast, had already undergone depopulation due to a longer and older period of contact (Wagley and Harris, 1958, p. 39).

WAGLEY'S INSIGHTS AND KA'APOR KINSHIP DATA

Based on the research of 1939-1940, Wagley and Galvão (1946) hypothesized that Tupí-Guaraní kinship could be characterized as bifurcate generational. That is based on the idea that the terms in the first ascending generation of ego's consanguines are divided (bifurcated) by line while simultaneously fused (merged) by sex; the term bifurcate merging as well as the focus on the consanguineal terms in the first ascending generation was an innovation initially proposed by Robert Lowie (1928; Godelier *et al.*, 1998, p. 9; Figure 1). The term in Portuguese incidentally is *fusão bifurcada* (Eduardo Viveiros de Castro, personal communication, 2008). Father's side has two terms for a male and female; mother's side has two different terms for a male and female. That means that ego's parents' generation looked like the Iroquois system, what Wagley and Galvão called 'Dakota' by way of the fashion of the time (Figure 2), whereas ego's generation looked like Hawaiian (Figure 3). At the time, they compared the relationship systems, based on fieldwork data, of the Cayuá of southern Brazil, the Tenetehara of Maranhão, and the Tapirapé of the Araguaia Basin. They found that in all three groups, the first ascending generation separated lineal from collateral lines, and equated same-sex siblings (which is bifurcate merging).

Yet the implicit distinction between cross and parallel was not carried down into the zero, or ego's, generation (Figure 4 – Tenetehara). There, all cousins, regardless of genealogical crossness, were classified with brother and sister terms (or terms equivalent to "male of my generation" and "female of my generation").

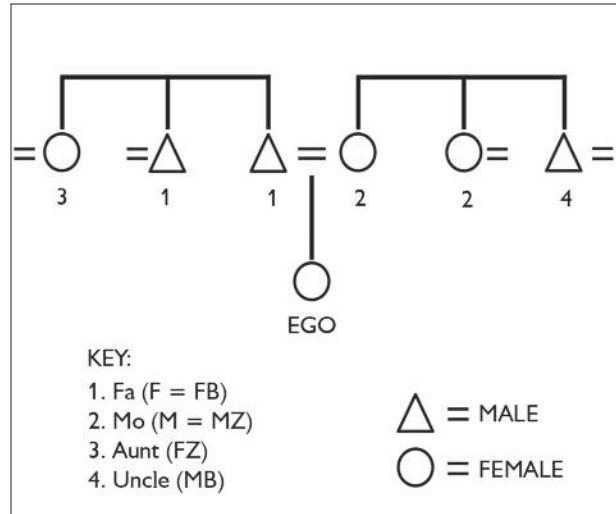


Figure 1. Model of bifurcate merging terminology (after Lowie, 1928).

The contrasting patterns of the zero and first ascending generation are labeled by the term bifurcate generational⁴. After the initial work with the Tapirapé, Wagley recorded further changes in the terminology (as in Figure 5). He pointed out, most significantly, that:

Some changes have occurred in kinship nomenclature since 1935. [Shapiro's] data indicate a strong tendency (which I believe began before 1939-40) for the kinship terms on the generation level of one's parents to shift from a bifurcate merging system to a bifurcate collateral one (Wagley, 1977, p. 100)⁵.

This desistance of the merging of terms for same sex siblings is perhaps one step toward conceptual isolation of the nuclear family, or any atomistic units of relatedness, at least terminologically. It is associated with the "decline of the matrilineal extended family", itself a

⁴ The Tupí-Guaraní language family was not as well known then as it is now; it would be divided up into eight subgroups, and Tenetehara and Tapirapé would be classified into the same subgroup (subgroup 4) (Rodrigues and Cabral, 2002). It is possible, therefore, that despite the geographic distance between them, which was one of the controls to obviate Galton's problem, incidentally, in the 1946 paper, that the similarities between them are not due to descent from the common ancestral language (Proto-Tupí-Guaraní) but from shared innovation. Cayuá (or Kaiwá), however, is in subgroup 1, hence that similarity would not be due to shared innovation. In any event, it would be known by later research that most Tupí-Guaraní terminologies are fully bifurcate merging in ego's parents' generations (e.g., MacDonald, 1965); in contrast, ego's own generation tends to be variable on how cousins are classified (Viveiros de Castro, 1998, p. 372).

⁵ Bifurcate collateral is probably more commonly called 'Sudanese' today (e.g., Shapiro, 1968, p. 21).

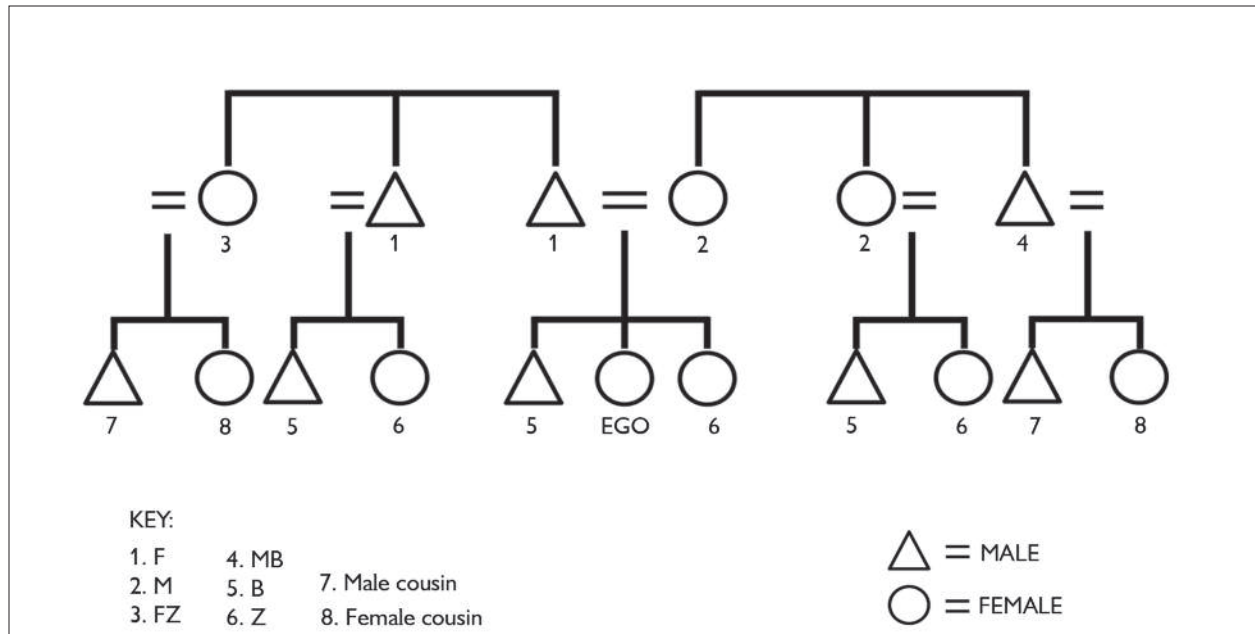


Figure 2. Model of Iroquois (or Dakota – Wagley and Galvão, 1946) terminology.

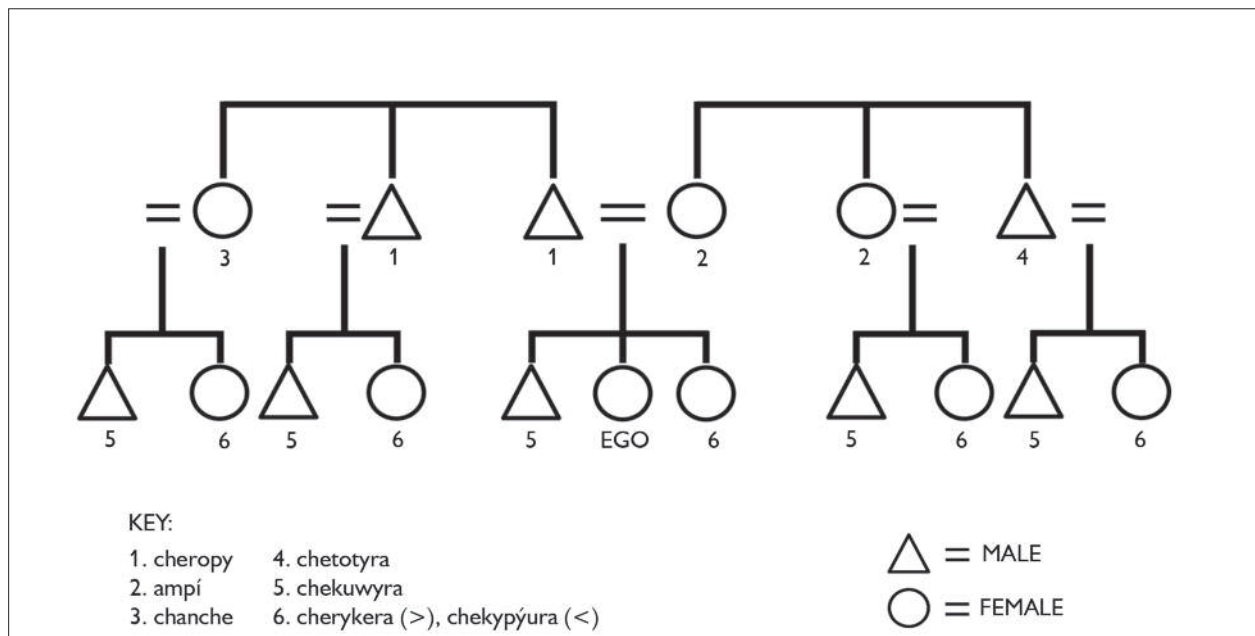


Figure 3. Bifurcate generational terminology of the Tapirapé, ca. 1939.

result of depopulation and autochthonous demographic politics that were no longer sensible (Wagley, 1977, p. 100; also Shapiro, 1968, p. 22).

In examination of the kinship terminology of another Tupí-Guaraní group, the Ka'apor, the details of which were unknown to Wagley and Galvão in the

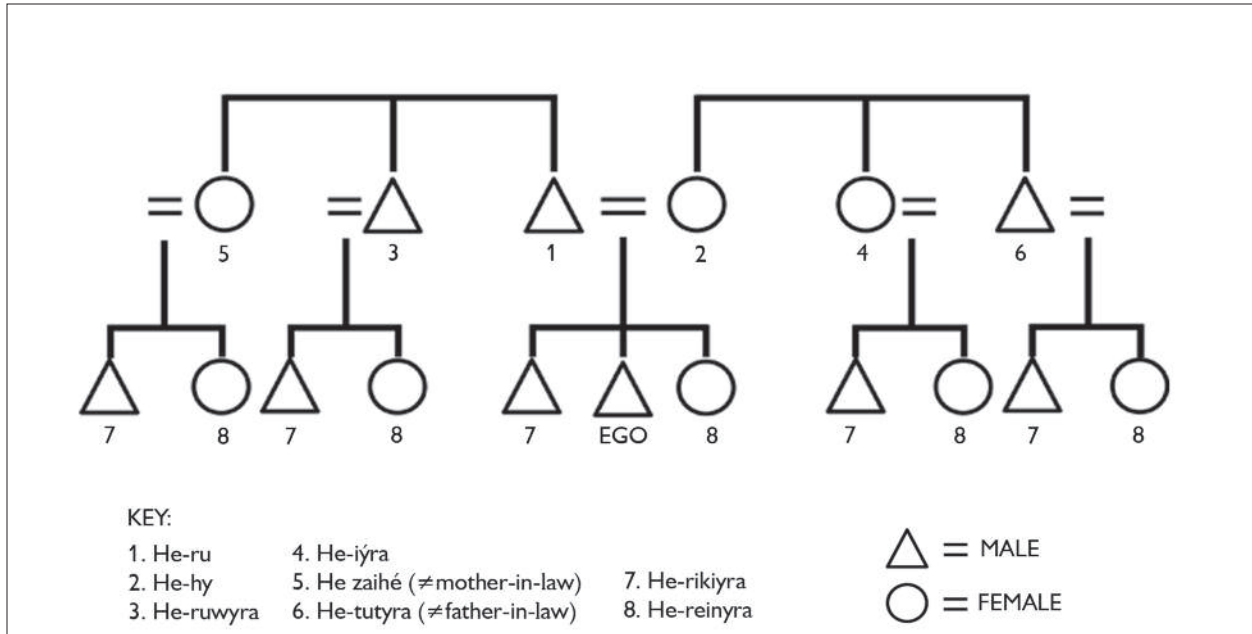


Figure 4. Bifurcate generational terminology of the Tenetehara, ca. 1945.

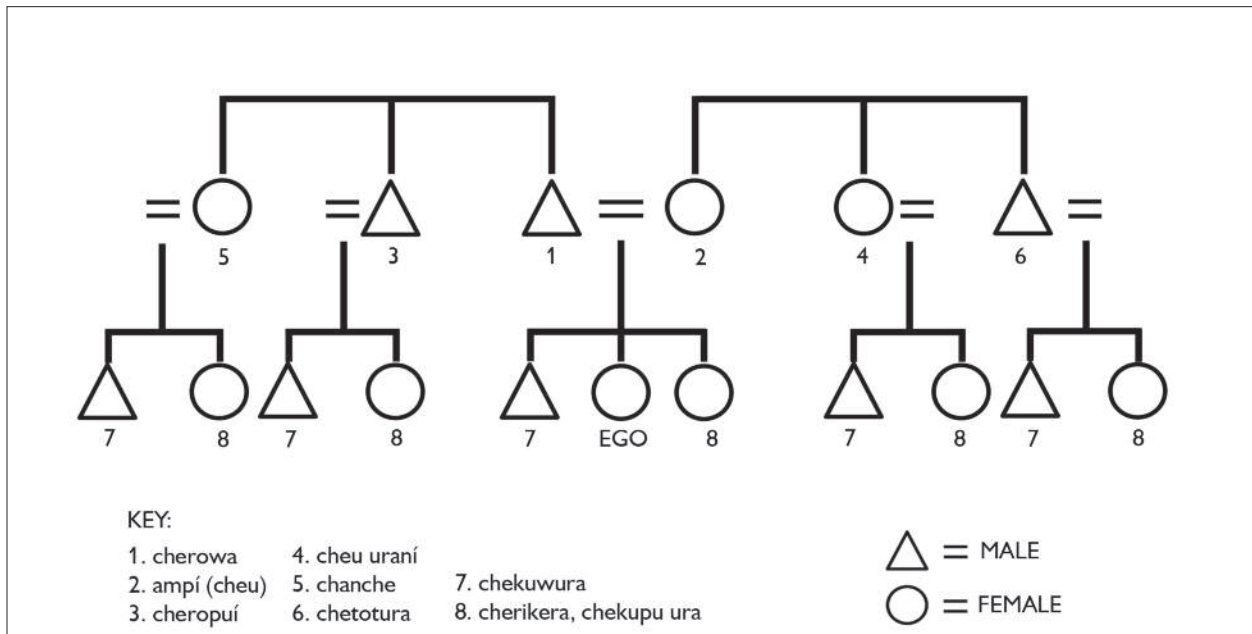


Figure 5. Bifurcate collateral terminology of the Tapirapé, ca. 1977.

1940s, there is at least partial corroboration of Wagley's views on the relation between depopulation and terminological structure. Wagley had in fact seen some

Ka'apor people in the 1940s, when they visited an Indian agency outpost that administered to the Tenetehara (e.g., Galvão, 1996, p. 39-40).

As to contemporary language classification, and their distance from the groups studied by Wagley, the Ka'apor pertain to subgroup 7 of the Tupí-Guaraní language family, and hence linguistically they are distinct both from the Tapirapé and the Tenetehara, who are both assigned to subgroup 4 (Rodrigues and Cabral, 2002). The Ka'apor also suffered significant population loss in the twentieth century, declining from about 2000 or more in 1928 to 490 in 1982 (Balée, 1984, p. 50-64; Ribeiro, 1956, p. 4-5). Like the Tapirapé, they have since rebounded to around 1000 (as of 2006, Ka'apor population was reported by the Fundação Nacional de Saúde (FUNASA) to be 991; Balée, 2014 [1998]). Initially, Ka'apor kin classification was essentially 'Dravidian', a conclusion to which Darcy Ribeiro (1996, p. 230) and I independently arrived, he in 1950 and I thirty years later (Balée, 1984, p. 284-286) (see Figure 6).

Some contemporary and past villages show evidence of a breakdown of what once had been not only 'Dravidian' (itself an instance of bifurcate merging), but an increasing

tendency to 'Sudanese' (or bifurcate collateral), especially in the first ascending generation (also see Shapiro, 1968, p. 14, who noted the same for Tapirapé), in which there is an increasing lineal emphasis (Laraia, 1972, p. 42). By that I mean, the lineal relatives (excluding brother and sister) are distinguished terminologically from collaterals. This appears to be more recent than bifurcate merging (Figure 7)⁶.

I am not yet certain, however, that this change applies to the cross cousins. I believe cousins are still generally distinguished by cross and parallel rules, but I lack firm evidence on this point. I obtained a freelist of Ka'apor kin terms in 2009 from 22 adult Ka'apor male and female respondents; there were 102 terms generated, of which 48 had a frequency greater than 1 (Appendix). Lineal relatives designated with single-word expressions seem to have higher psychological salience than collateral relatives (Tables 1 and 2), who nevertheless qualify as relatives and are indicated with valid descriptive terms (Balée and Nolan, n.d.).

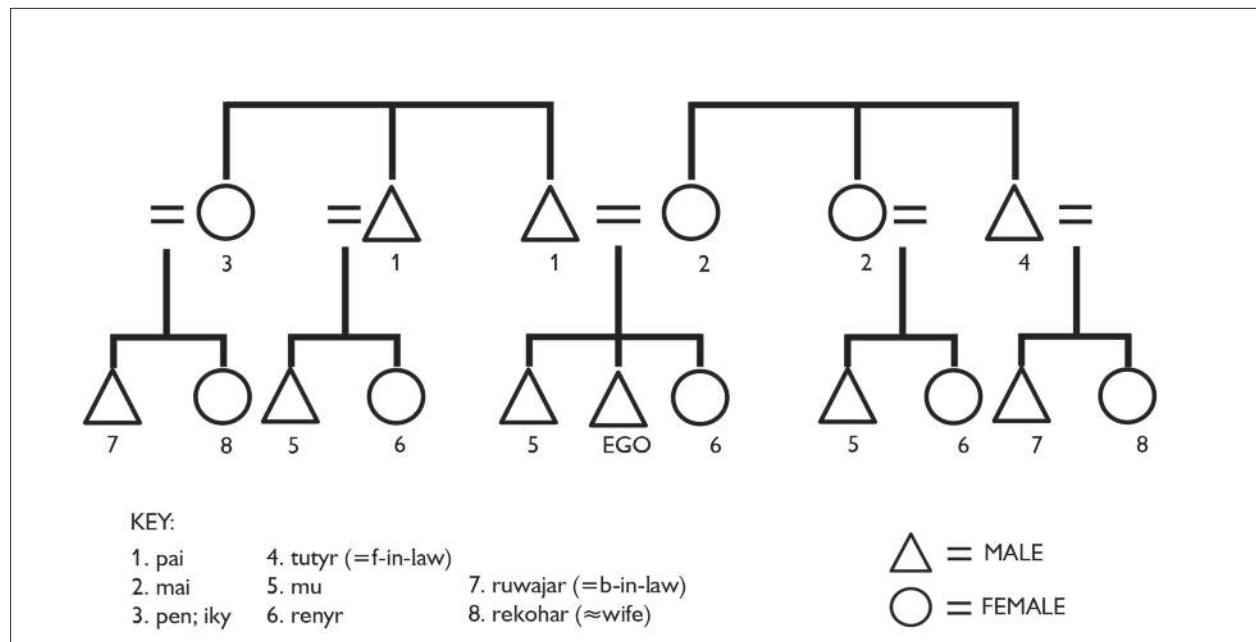


Figure 6. Dravidian type of terminology of the Ka'apor, ca. 1950-1980.

⁶ I am not certain whether the cross/parallel distinction has been abandoned entirely in ego's (zero) generation.

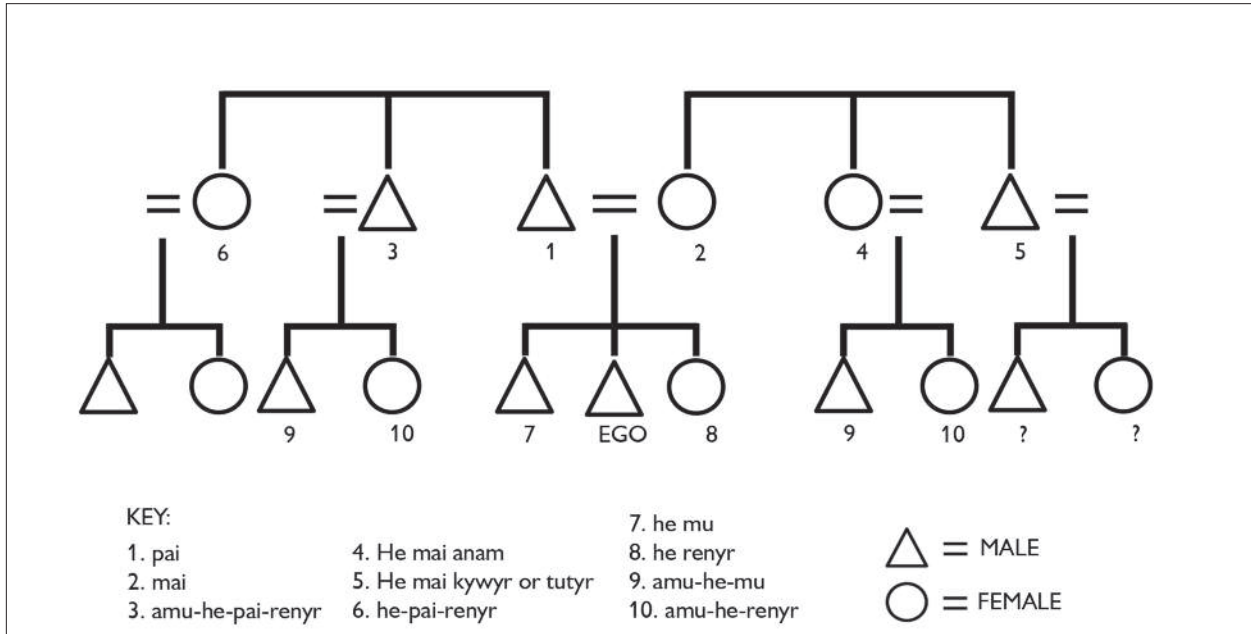


Figure 7. Bifurcate collateral type of terminology of the Ka'apor, ca. 2009.

Table 1. Top ten kinship terms by Smith's S, Ka'apor.

Item	Terms	Frequency	Percent	Average Rank	Smith's S
1	<i>hēmái</i>	17	77	3.824	0.620
2	<i>hēpái</i>	15	68	3.133	0.579
3	<i>hēramūi</i>	18	82	6.222	0.514
4	<i>hēari</i>	17	77	5.824	0.510
5	<i>hēanam</i>	12	55	6.417	0.338
6	<i>hēkywyr</i>	10	45	5.800	0.314
7	<i>hēmu</i>	9	41	5.444	0.301
8	<i>hērenyr</i>	9	41	7.000	0.266
9	<i>hēra'yr</i>	7	32	9.143	0.150
10	<i>amuhēpai</i>	6	27	8.500	0.138

Descriptive terms for kin listed in free recall exercises by more than one respondent are presented in the Appendix. I noted an emphasis on the nuclear family (Balée, 1984) earlier, and indeed that was largely the subject of my analysis of social organization, though the family structure had not yet become fully atomized. Extended families existed, and they still do, though a restudy of family organization is needed to corroborate

the terminological changes, and the cognitive salience attributed to them. In other words, it is not clear whether family structure is changing throughout the Ka'apor habitat, in part because with population rebounding, and with organizational changes in village layouts and locations due to external threats to their lands, people are nucleating in larger villages than before. There does seem to be a correspondence, though, between contact, depopulation,

Table 2. Descriptive Ka'apor kin terms from freelist with response frequency > 1. Legends: m.s. signifies male speaker or male speaking; f.s. signifies female speaker or female speaking; F = father; M = mother; B = brother; Z = sister; S = son; D = daughter. These letters in a sequence also indicate possession before the last letter, in order to define a kinship alter. For example, FBS = father's brother's son, MZDD = mother's sister's daughter's daughter, and so on.

Terms	Morpheme-by-morpheme gloss	English gloss or kintype	Frequency
<i>amu-hê-pai</i>	other-my-father	my father's brother	6
<i>amu-hê-mai</i>	other-my-mother	my mother's sister	6
<i>hê-ramûi-pai</i>	my-grandfather's-father	grandfather's father	4
<i>amu-hê-anam</i>	other-my-sister (f.s.)	my female parallel cousin	4
<i>hê-ari-anam</i>	my-grandmother's-sister	grandmother's sister	5
<i>hê-renyr-memyr</i>	my-sister's-child (m.s.)	sister's child	4
<i>hê-mai-anam</i>	my-mother's-sister	mother's sister	3
<i>hê-kywyr-rajyr</i>	my-brother's-daughter (f.s.)	brother's daughter	3
<i>amu-hê-mu</i>	other-my-brother	FBS/MZS (m.s.)	4
<i>hê-kywyr-ra'yr</i>	my-brother's-son (f.s.)	brother's son	3
<i>amu-hê-ramûi</i>	other-my-grandfather	grandfather's brother	5
<i>hê-memyr-rekhar</i>	my-child's-spouse (f.s.)	daughter-in-law/son-in-law	3
<i>hê-anam-memyr</i>	my-sister's-child (f.s.)	sister's child	2
<i>amu-hê-kywyr</i>	other-my-brother	FBS/MZS (f.s.)	4
<i>amu-hê-rajyr</i>	other-my-daughter	BD (m.s.)	2
<i>hê-pai-mu</i>	my-father's-brother	FB	3
<i>hê-mu-ra'yr</i>	my-brother's-son	BS (m.s.)	3
<i>amu-hê-renyr</i>	other-my-sister	FBD/MZD	4
<i>hê-ramûi-anam</i>	my-grandfather-relative	grandfather's kin	2
<i>hê-pai-mai</i>	my-father's-mother	grandmother	3
<i>hê-kywyr-anam</i>	my-brother's-sister (f.s.)	sister	3
<i>amu-hê-memyr</i>	other-my-child (f.s.)	ZD?	2
<i>hê-rajyr-memyr</i>	my-daughter's-child (m.s.)	grandchild	2
<i>hê-memyr-sawa'e</i>	my-daughter's-husband	son-in-law	2
<i>hê-rajyr-kywyr</i>	my-daughter's-brother (m.s.)	son	2
<i>hê-ramûi-renyr</i>	my-grandfather's-sister	great aunt	2
<i>amu-hê-mu-ra'yr</i>	other-my-brother's-son (m.s.)	FBSS/MZSS	2
<i>hê-ari-memyr</i>	my-grandmother's-child	aunt/uncle	2
<i>amu-hê-renyr-memyr</i>	other-my-sister's-daughter (m.s.)	MZDD/FBDD	2
<i>hê-ramûi-mu</i>	my-grandfather's-brother	great uncle	2
<i>hê-ari-kywyr</i>	my-grandmother's-brother	great uncle	3

and change in terminological structure from bifurcate merging to bifurcate collateral, and in this, the empirical and scientific validity of Charles Wagley's original findings among the Tapirapé and Tenetehara are path-breaking and worthy of careful attention within the ambit of research on Amazonian societies.

REFERENCES

- ADAMS, William Y. **The philosophical roots of anthropology**. Stanford: Center for the Study of Language and Information, 1999.
- ANDRADE, Oswald de. O manifesto antropófago. **Revista de Antropofagia**, v. 1, n. 1, p. 3-7, 1928.
- ARENSBERG, Conrad. The community as object and as sample. **American Anthropologist**, v. 63, n. 2, p. 241-264, 1961.
- BALÉE, William. The four-field model of anthropology in the United States. **Amazônica**, v. 1, n. 1, p. 28-53, 2009.
- BALÉE, William. **Povos indígenas no Brasil**. Ka'apor. [s. l.]: Instituto Socioambiental, 2014 [1998]. Available at: <<http://pib.socioambiental.org/pt/povo/kaapor>>. Accessed on: 8 January 2014.
- BALÉE, William. **The persistence of Ka'apor culture**. 1984. Tese (Doctorate in Anthropology) – Columbia University, New York, 1984.
- BALÉE, William; NOLAN, Justin M. Assessing cognitive reality of landscape transformation in Amazonia. In: ISENDAHL, Christian; STUMP, Darryl (Eds.). **Oxford University Handbook of Historical Ecology and Applied Archaeology**. Oxford: Oxford University Press (submitted).
- BERNARD, H. Russell. **Research methods in anthropology: qualitative and quantitative approaches**. 2. ed. Thousand Oaks, CA: Sage, 1994.
- CHERNELA, Janet. Antropologia (etnologia amazônica). In: BARBOSA, Rubens Antônio; EAKIN, Marshall; ALMEIDA, Paulo Roberto de (Eds.). **O Brasil dos Brazilianistas: um guia dos estudos sobre Brasil nos Estados Unidos, 1945-2000**. São Paulo: Paz e Terra, 2002. p. 233-268.
- DENEVAN, William M. Introduction. In: DENEVAN, William M. (Ed.). **The native population of the Americas in 1492**. 2. ed. Madison: University of Wisconsin Press, 1992. p. 1-12.
- EGGAN, Fred. The graduate program. In: MANDELBAUM, D. G.; LASKER, G. W.; ALBERT, E. M. (Eds.). **The teaching of Anthropology**. Washington: American Anthropological Association, 1963. (Memoirs of the American Anthropological Association, 94). p. 409-419.
- GALVÃO, Eduardo. **Diários de campo de Eduardo Galvão: Tenetehara, Kaioá e índios do Xingu**. Edição de Marco Antonio Gonçalves. Rio de Janeiro: Editora UFRJ, 1996.
- GODELIER, Maurice; TRAUTMANN, Thomas R.; TJON SIE FAT, Franklin. Introduction. In: GODELIER, Maurice; TRAUTMANN, Thomas R.; TJON SIE FAT, Franklin. (Eds.). **Transformations of Kinship**. Washington: Smithsonian Institution Press, 1998. p. 1-26.
- HARRIS, Marvin. Charles Wagley's contribution to anthropology. **Florida Journal of Anthropology**, Special Number, Gainesville, n. 6, p. 1-14, 1990.
- HARRIS, Marvin. **Cultural materialism: the struggle for a science of culture**. New York: Random House, 1980.
- LARAIA, Roque de Barros. **Organização social dos Tupi contemporâneos**. 1972. Tese (Doctorate in Sociology) – University of São Paulo, São Paulo, 1972.
- LÉVI-STRAUSS, Claude. **Tristes tropiques**. New York: Penguin, 1992.
- LÉVI-STRAUSS, Claude. **The elementary structures of kinship**. Boston: Beacon Press, 1969.
- LOWIE, Robert H. A note on relationship terminologies. **American Anthropologist**, v. 30, n. 2, p. 263-267, 1928.
- MACDONALD, J. Frederick. Some considerations about Tupi-Guarani kinship structures. **Boletim do Museu Paraense Emílio Goeldi, Nova Série, Antropologia**, n. 26, p. 1-20, 1965.
- MAGEE, Pennie L.; WILSON, John (Eds.). Looking through the Kaleidoscope: essays in honor of Charles Wagley. **Florida Journal of Anthropology**, Special Number, n. 6, p. 11-17, 1990.
- MARGOLIS, Maxine L.; CARTER, William (Eds.). **Brazil, anthropological perspectives: essays in honor of Charles Wagley**. New York: Columbia University Press, 1979.
- REDFIELD, Robert. **The folk culture of Yucatán**. Chicago: University of Chicago Press, 1941.
- REDFIELD, Robert; LINTON, Ralph; HERSKOVITS, Melville. Memorandum for the study of acculturation. **American Anthropologist**, v. 38, n. 1, p. 149-152, 1936.
- RIBEIRO, Darcy. **Diários índios: os Urubus-Kaapor**. São Paulo: Companhia das Letras, 1996.
- RIBEIRO, Darcy. Convívio e contaminação: efeitos dissociativos da depopulação provocada por epidemias em grupos indígenas. **Sociologia**, v. 18, n. 1, p. 3-50, 1956.
- RODRIGUES, Aryon D.; CABRAL, Ana Suely Arruda Câmara. Revendo a classificação interna da família Tupí-Guaraní. In: Encontro Internacional do Grupo de Trabalho sobre Línguas Indígenas da ANPOLL, 1., 2002, Belém. **Anais...** Belém: UFPA, 2002. Tomo I, p. 327-337.
- SAMPAIO, Teodoro. **O Tupi na geografia nacional**. São Paulo: Companhia Editora Nacional, 1987 [1901]. (Brasiliana, v. 380).

- SCHAAN, Denise Pahl. **Sacred geographies of ancient Amazonia**: historical ecology of social complexity. Walnut Creek: Left Coast Press, 2011.
- SHAPIRO, Judith. Tapirapé kinship. **Boletim do Museu Paraense Emílio Goeldi, Nova Série, Antropologia**, n. 37, p. 1-37, 1968.
- SMITH, Michael E. **The Aztecs**. 3. ed. Oxford: Wiley-Blackwell, 2012.
- TORAL, André. **Povos indígenas no Brasil**. Tapirapé. [s. l.]: Instituto Socioambiental, 2010. Available at: <<http://pib.socioambiental.org/pt/povo/tap>>. Accessed on: 23 November 2014.
- VIVEIROS DE CASTRO, Eduardo. Dravidian and related kinship systems. In: GODELIER, Maurice; TRAUTMANN, Thomas R.; TJON SIE FAT, Franklin (Eds.). **Transformations of Kinship**. Washington: Smithsonian Institution Press, 1998. p. 332-385.
- VIVEIROS DE CASTRO, Eduardo. **Araweté**: os deuses canibais. Rio de Janeiro: Jorge Zahar, 1986.
- WAGLEY, Charles. **Welcome of tears**: the Tapirapé Indians of Central Brazil. New York: Oxford University Press, 1977.
- WAGLEY, Charles. **An introduction to Brazil**. New York: Columbia University Press, 1971.
- WAGLEY, Charles. **The Latin American tradition**: essays on the unity and the diversity of Latin American culture. New York: Columbia University Press, 1968.
- WAGLEY, Charles. Cultural influences on population: a comparison of two Tupi tribes. **Revista do Museu Paulista, Nova Série**, n. 5, p. 95-104, 1951.
- WAGLEY, Charles. **The economics of a Guatemalan Village**. Menasha: American Anthropological Association, 1941. (Memoir 58).
- WAGLEY, Charles; GALVÃO, Eduardo. **Os índios Tenetehara**: uma cultura em transição. Rio de Janeiro: Ministério de Educação e Cultura, Serviço de Documentação, 1961.
- WAGLEY, Charles; HARRIS, Marvin. **Minorities in the New World**: six case studies. New York: Columbia University Press, 1958.
- WAGLEY, Charles; AZEVEDO, Thales de. Sobre métodos de campo no estudo de comunidade. **Revista do Museu Paulista, Nova Série**, v. 5, p. 227-237, 1951.
- WAGLEY, Charles; GALVÃO, Eduardo. **The Tenetehara Indians of Brazil**: a culture in transition. New York: Columbia University Press, 1949.
- WAGLEY, Charles; GALVÃO, Eduardo. O parentesco Tupi-Guarani. **Boletim do Museu Nacional, Nova Série, Antropologia**, n. 6, p. 1-24, 1946.

Appendix. Freelist of Ka'apor kin terms with frequency > 1 (n = 22), ranked by frequency. Ordering by frequency means there will be statistical ties. Although frequency is a useful guide to cultural importance of terms, Smith's S in the last column should be consulted as a guide to actual cognitive salience, for its weighted measure breaks ties in frequencies. In such manner, although the term for 'grandmother' and 'mother' share the same frequency (17, as in items 1 and 2), the term for 'mother' is much more important in light of the S values.

(Continue)

Item	Ka'apor kin terms	Frequency	% occurrences	Average Rank	Smith's S
1	<i>Hēari</i>	17	77	5.824	0.510
2	<i>Hēmai</i>	17	77	3.824	0.620
3	<i>Hēramūi</i>	17	77	6.353	0.474
4	<i>Hēpai</i>	15	68	3.133	0.579
5	<i>Hēanam</i>	12	55	6.417	0.338
6	<i>Hēkywyr</i>	10	45	5.800	0.314
7	<i>Hēmu</i>	9	41	5.444	0.301
8	<i>Hērenyr</i>	9	41	7.000	0.266
9	<i>Hēra'yr</i>	7	32	9.143	0.150
10	<i>Hērajyr</i>	7	32	11.000	0.114
11	<i>Amuhēari</i>	6	27	11.833	0.074
12	<i>Amuhēpai</i>	6	27	8.500	0.138
13	<i>Amuhēmai</i>	6	27	8.833	0.130
14	<i>Hērainō</i>	6	27	12.667	0.075
15	<i>Amuhēramūi</i>	5	23	10.600	0.088
16	<i>Hēarianam</i>	5	23	10.600	0.108
17	<i>Hēmemyr</i>	5	23	7.400	0.108
18	<i>Hērakehar</i>	5	23	12.400	0.071
19	<i>Amuhēkywyr</i>	4	18	8.750	0.073
20	<i>Amuhēanam</i>	4	18	7.750	0.116
21	<i>Hēramūipai</i>	4	18	5.750	0.130
22	<i>Amuhērenyr</i>	4	18	14.750	0.055
23	<i>Amuhēmu</i>	4	18	10.750	0.091
24	<i>Hērenyrmemyr</i>	4	18	9.500	0.104
25	<i>Hēmaianam</i>	3	14	6.000	0.096
26	<i>Hēmura'yr</i>	3	14	12.667	0.059
27	<i>Hēkywyr'yr</i>	3	14	5.333	0.089
28	<i>Hēarikywyr</i>	3	14	17.667	0.021
29	<i>Hēkywyr'rajyr</i>	3	14	6.000	0.095
30	<i>Hēpaimai</i>	3	14	9.667	0.046

Appendix.

(Conclusion)

31	<i>Hēmemyrrekohar</i>	3	14	9.667	0.075
32	<i>Hēpaimu</i>	3	14	9.333	0.067
33	<i>Amuhērainō</i>	3	14	13.667	0.029
34	<i>Hēkywyranam</i>	3	14	14.000	0.045
35	<i>Hērajyrkywyr</i>	2	9	16.000	0.030
36	<i>Hērajyrmemyr</i>	2	9	10.000	0.036
37	<i>Hēramūianam</i>	2	9	9.500	0.050
38	<i>Hēanammemyr</i>	2	9	4.500	0.075
39	<i>Hēramūimu</i>	2	9	18.500	0.021
40	<i>Hēarimemyr</i>	2	9	11.000	0.027
41	<i>Hēsawa'e</i>	2	9	17.500	0.022
42	<i>Amuhēmura'yr</i>	2	9	14.000	0.027
43	<i>Amuhērajyr</i>	2	9	5.000	0.070
44	<i>Amuhērenyrmemyr</i>	2	9	15.000	0.022
45	<i>Hēmemyrsawa'e</i>	2	9	12.000	0.032
46	<i>Hēruwajar</i>	2	9	8.000	0.051
47	<i>Amuhēmemyr</i>	2	9	10.000	0.041
48	<i>Hēramūirenyr</i>	2	9	16.000	0.027