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15 Perspectivism through language: A view from Amazonia

South America, and especially Lowland Amazonia and Circum-Amazonian regions, constitute the locus of extreme linguistic diversity in terms of their “phylogenetic” range (that is, how many genetic groupings are present in an area), “language density” (involving the sheer number of languages or linguistic varieties spoken), and the diversity of linguistic structures. This goes hand-in-hand with cultural diversity, in terms of a rich gamut of societal organizations, norms of social behavior, knowledge, beliefs and customs. And yet we can trace a few typically Amazonian phenomena, which transcend the boundaries of distinct languages and cultures. Among these are the shared ontological stance known as Amazonian perspectivism – the underlying primordial unity of humans and other entities. This is seen in the choice of linguistic features – genders and classifiers. The transformation of a visual form and its disguise are mirrored in the concept of clothing or outer skin visible to those who have special powers of seeing. The double, or even multiple, nature of entities – including jaguar-shamans and peccary-shamans – is expressed through further grammatical means. The chapter address these and other, putative, instantiations of Amazonian perspectivism in the languages of the region.

1 How Amazonia is special: A backdrop

Lowland Amazonia and the adjacent Circum-Amazonian regions constitute the locus of extreme linguistic diversity in its varied guises – in terms of their “phylogenetic” range, that is, the number of genetic groupings present in an area; in terms of its “language density”, that is, a sheer number of languages or linguistic varieties spoken; and in terms of diversity of linguistic structures. This goes

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hand-in-hand with cultural diversity, spanning a rich gamut of societal organizations, norms of social behavior, knowledge, beliefs and customs (see Aikhenvald 2015 and also Epps 2020, for an appraisal of different aspects of linguistic and cultural diversity). The linguistic diversity in the Amazon Basin – the world’s major river system – is rivalled only by that of the island of New Guinea. The region comprises over 350 extant languages grouped into over fifteen language families, in addition to a number of isolates (Loukotka 1968, Tovar and Tovar 1984, Dixon and Aikhenvald 1999, Aikhenvald 2015: 19–23, 2022). The consensus among archaeologists is that the Americas were first populated approximately 12,000 years ago, possibly in successive waves of migration across the Bering Strait (a brief history and references are in Aikhenvald 2015: 2–17). As a result of population movements, dispersals, and displacement, the linguistic map of Amazonia resembles a patchwork quilt. Most major families – including Arawak, Tupí, and Cariban – are spoken in several disconnected geographical locations.

Intensive language contact between adjacent groups and historically documented migrations have resulted in the creation of numerous linguistic areas across the continent. These include:

- the Vaupés River Basin Linguistic Area, the adjacent regions of the Upper Rio Negro Basin, and the neighboring Caquetá-Putumayo River Basin (known as “the people of the centre of the world”: see Aikhenvald 2002, 2015, 2022 on the linguistic picture of Amazonia and a summary of work on the Vaupés River Basin Linguistic Area and neighboring regions, Echeverri 1997 and Wojtylak 2020, 2021 on the Caquetá-Putumayo area);
- the Pre-andine region (see Adelaar 2004 and Wise 2011 on shared cultural and linguistic features across the Pre-andine area and the Andean foothills and Valenzuela 2015);
- the Xingu Park area (see Seki 1999, 2010 on the Xingu region as a cultural area and an incipient linguistic area);
- the Guaporé-Mamoré area (see Crevels and van der Voort 2008);
- and the Gran Chaco area (see Comrie et al. 2010, González 2015, and Ciucci 2020 on the linguistic and cultural diffusion across the region).

Mass language extinction, especially in the areas of the head waters of the Amazon, and eastern Brazil occupied by Europeans soon after the invasion, makes the task of revealing the exact linguistic picture, and the past patterns of language and culture interaction in Amazonia, truly daunting. Over 60% of indigenous languages are estimated to have become extinct since the European conquest (Adelaar 2000, 2004, Loukotka 1968, Hemming 1978a, b, Aikhenvald 2015, 2022). As a consequence of constant pressure from major national, and sometimes other indigenous languages, most languages of Amazonia are currently

endangered. The effects of language obsolescence and concomitant loss of traditional culture patterns, plus the influence of national languages and cultures, create further complications for studies of languages and social correlates for the recurrent linguistic parameters.

Shared linguistic and cultural features may be due to a conglomerate of substrata and contact with extinct groups, many of them no longer recoverable. Numerous indigenous groups became depleted – mostly due to epidemics and raids, subsequent to the colonial invasion. Survivors from one group amalgamated with their neighbors of different, and often no longer known groups. Examples include:

- the Tupari, a Tupí-speaking group in northern Brazil (Caspar 1956: 220–221);
- the Palikur, an Arawak-speaking group in the Brazilian state of Amapá and the adjacent regions of French Guiana (Green and Green 2013, Diana Green p.c.);
- the Yucuna, an Arawak-speaking group in Colombia (Fontaine 2008: 48–50, 83–84);
- the Waiwai, a Cariban-speaking group in Brazil and Suriname (see Carlin 2006, 2011 on the Waiwai, and their “nested identities”);
- the Yanasha’ (or Amuesha), an Arawak-speaking group in Peru (Adelaar 2006);
- the Sorowaha, one of the least known Arawá-speaking groups in southern Amazonia in Brazil (Dixon 2004: 9).

As a consequence, each of these languages display unusual linguistic features, and are divergent from their genetic relatives. In the absence of reliable data and historical records, we will never be able to go beyond mere hypotheses about possible paths of contact-induced change, and the exact reasons for commonalities and for diversification. Amazonia remains a land of historical puzzles.

Despite these pitfalls, the past decades have seen a surge of interest in establishing correlations between linguistic features and the societal characteristics of Amazonian peoples. Against the backdrop of an overwhelming diversity, common features emerge.

This chapter focuses on a number of common features shared by indigenous peoples of the Amazon, especially perspectivism and its reflection in the extant languages.

2 Unity in diversity: In search of common threads

Shared structural features across Amazonian languages have led some scholars to a suggestion that the whole of Amazonia may be considered a linguistic area, setting them apart from the languages of the Andes (see, for instance, Derbyshire and Pullum 1986, Derbyshire 1987, and also Key 1993).¹

A number of forms are shared by unrelated Amazonian languages. Payne (1990) identified five widespread grammatical forms, including a causative prefix *mV-* and valency-changing affixes of the shape *-ka*, in addition to monosyllabic possessive and nominalizing affixes. The form **koko* ‘mother’s brother, father-in-law’ can be reconstructed for Proto-Arawá; a similar form **kuhko* ‘uncle, father-in-law’ was reconstructed for Proto-Arawak. In his pioneering study of indigenous languages of Brazil, von Martius (1867, Vol. 1: 359–360) mentioned a few similar forms meaning ‘uncle’ in unrelated languages including Kariri (Macro-Jê) and Macushi (Carib). He grouped them under the name of “Guck” or “Coco” languages. Further forms shared by genetically unrelated languages include *kanawa* ‘canoe’, found in Carib and Arawak families, in addition to a number of others (such as Arawá).²

A number of mythological motives are shared by Amazonian groups – including jaguar shamans, tapir avoidance and an association between agouti (a large rodent) and the underground magical world, in addition to a pervasive tendency towards twin-avoidance. A discussion of pan-Amazonian mythological motives is in Roe (1982) and Urton (1985). Pan-Amazonian features – both linguistic and cultural – may point towards traces of older, and oftentimes no longer recoverable, language contact patterns which may have played a role in shaping the linguistic landscape of Amazonia as a linguistic continent and are reminiscent of “pan-African” features (along the lines of Heine and Nurse 2008).

A further typically Amazonian phenomenon – which transcends the boundaries of linguistic families and areas – is a shared ontological stance known as Amazonian perspectivism.

1 The “Amazonian” linguistic type is contrasted to the “Andean” type in Dixon and Aikhenvald (1999) and Aikhenvald (2015: 74). A putative division of Amazonian languages along a hypothetical East-West divide (e.g., Birchall 2014, and references there) is based on partial investigation of a limited set of languages, and is not borne out by facts (especially in view of extensive language loss in the Eastern areas of the Amazon Basin).

2 See Dixon (2004: 13) for Proto-Arawá, and Aikhenvald (2002) for Proto-Arawak; a number of further forms are addressed by Zamponi (2020) and Aikhenvald (2015: 71, 2022).

2.1 Amazonian perspectivism: A shared ontological stance

One shared feature permeates most if not all traditional Amazonian communities. This concerns “a basic animistic ontological stance whereby humans and animals who share their interiority (*anima*) but differ in their physicality form part of a shared relational frame of interaction” (Carlin 2018: 315, Halbmayer 2012: 12), captured by the notion of “perspectivism”. This notion and the term, coined by Viveiros de Castro (1998, 2004a, 2004b), sum up the indigenous conceptions concerning “the configuration of distinctions between humans and nonhumans” (Vanzolini and Cesarino 2018). This is reminiscent of the concept of “animism” discussed by Descola (2005).

According to the understanding of the world common to numerous Amerindian people, in mythological times – or at the beginning of time – various entities shared a general human condition. A speaker of Kari’na, a Cariban language, tellingly referred to stories about those primordial times – of the mythological past – as *isenurupiry ja’konombo aurananon*, freely translated as ‘things that happened in the time when everything still spoke to each other, or stories from the time of our beginning’ (Carlin 2018: 332).

As this primeval condition suffered a disruption, the varied types of humans transformed into different species of animals and other entities – vegetables, plants, artifacts, etc.; for a detailed discussion of recent anthropological work on this “animism”, perspectivism and the ontological turn, see Halbmayer (2012) (with special attention to Cariban languages). The underlying unity of the erstwhile entities in their primeval human condition can still be recognized, albeit in a covert way. It can be uncovered and made clear to those privy to such knowledge in shamanic practices, and also in customs associated with hunting and fishing. Animals, spirits, and also objects “can still reveal an inner human form usually associated with their ‘soul’ or ‘double’” (Vanzolini and Cesarino 2018). “The continuity between species” manifests itself in the way each species sees itself, and how they share culture and language (Costa and Fausto 2010: 94). The importance of visual, rather than aural, perception for the recognition of the nature of entities was made clear by Lewy (2012), and also Halbmayer (2012: 17): this foregrounds the special powers of vision and the importance of visual perception across languages and cultures, in Amazonia and beyond it (see Aikhenvald and Storch 2013). As Rosengren (2006: 810) put it in his analysis of the Matsigenka (a Campa (Arawak)-speaking group of Peruvian Amazon), the net result is “the creation of a community of similars” – spanning humans, shamans, and those behind a non-human disguise, and thus highlighting their similarity.

This nonhuman disguise can be seen as just an outer covering, clothing, or “skin” (see the discussion of a special classifier *-maka* ‘extended piece of cloth’

in Tariana further on in this section). The form – the clothing – determines the appearance depending on a viewpoint, and often the nature and the intentions of the perceiver. The Amazonian animism operates on the basis of a spiritual unity (of humans and animals) and a corporeal diversity, so that what one sees in physical terms is not necessarily that which it is in essence: a spirit or soul can be wearing “clothes” that mask the underlying essence. “Clothes”, or outer form(s), “is a common metaphor in Amazonia to describe not only outward appearances but also attributes and competences associated with beings of that outer appearance. Thus, in the transformative world of Amazonians, where focus is on states of being and changes of state, changing one’s ‘clothes’ entails that appearances may be deceptive” (Carlin 2018: 315). As Rivière (1994) phrased it in the title of his oft-quoted paper, in Amazonia, “*What you see is not what you get*”.

The inherent animism and perspectivism in the sense of an underlying unity of humans and non-humans tend to be reflected in those linguistic categories which are known to be sensitive to societal features and cultural stereotypes (summarized in Aikhenvald, Dixon, and Jarkey 2021). The unity of humans and non-humans reflected in the language is not a uniquely Amazonian feature. Its salience in the grammatical structure of Amazonian languages highlights its special status for the region. Among these are patterns of nominal classification (classifiers and gender) and kinship systems.

The unity of all animate beings is reflected in the assignment of classifiers in Murui, a Witotoan language from the Caquetá-Putumayo region. The fluidity of the distinction between humans and non-humans in Murui noun classification can be understood from the perspective of the people’s cosmology (Wojtylak 2021). According to the Murui mythology, at the beginning of time most beings were simultaneously human and non-human. They used to be able to communicate with each other, and at the same time had physical or behavioral traits characteristic of non-humans. Later, they transformed into the present-day species of animals, vegetables, artefacts, and other kinds of beings. *Jimenaki*, Possum Man, once a powerful mythological being who had a characteristic monkey-like speech, is a case in point (see Wojtylak 2020). Punished for burning his children alive, *Jimenaki* was transformed into a species of possum, known as *jimenaki*. Along similar lines, some of the names for species of animals and plants in Murui share the same roots, and are understood by the people to “belong to one another” (Wojtylak 2015: 555, 2021). Many of such original transformations explain similarities in the assignment of Murui classifiers to human and non-human referents with shared forms, and shared histories. Along similar lines, the assignment of grammatical gender to animals and numerous non-human entities in Ayoreo, a Zamucoan language of Paraguay, is associated with the role the protagonists

played in myth (Ciucci 2021, and references therein). The same principle applies to most non-human entities in the Campa cosmology (Weiss 1972: 170).

The intrinsic unity of humans and animals is reflected in their integration into the classificatory kinship system. The Vaupés River Basin Linguistic area is a case in point. Languages spoken in this area include the East Tucanoan languages Tucano, Wanano, Desano, Piratapuya, Tuyuca (and a few others), and just one Arawak language, Tariana. Speakers of these languages participate in the traditional exogamous marriage network, which ensures obligatory multilingualism. According to the main principle of linguistic exogamy, one can only marry someone who speaks a different language (see Aikhenvald 2002, 2015: 73–82, and references therein). The classificatory kinship system is the basis for interactions and social relations between the members of the marriage network within the Vaupés River Basin Linguistic Area – as for many other Amazonian groups; kinship system is of Dravidian type (based on cross-cousin marriage). In traditional stories, animals – especially mammals – interact as humans would. They refer to each other as *naí*, a marriageable cousin (e.g., mother’s brother’s child; see, for instance, Aikhenvald 2003: 513). This is a feature shared by other groups across the region. Similar phenomena were described by Rosengren (2006) for the Matsigenka, and Crocker (1985) for the Macro-Jê-speaking Bororo, within the framework of totemism.

Animals share their essence with humans – and are believed to have been “people-like” at the beginning of it all, but they are to be kept apart. A reason for twin infanticide – a prominent feature of many Amazonian groups, from the Yanomami in the north to the Sorowaha in the south – is “to affirm human distinctiveness vis-à-vis animals” (Marroquín and Haight 2017: 263, Stephen Hugh-Jones p.c.): multiple births are frequently observed among animals, and twins and triplets are considered animal-like and non-quite human (see also Ball and Hill 1996: 856 on an association between twins and wild animals). A twin can be conceptualized as an unwanted and unpredictable “double” – as one dangerous in a society permeated with ambiguous entities which appear in different disguise. We turn to this in Section 2.2.

The ambiguous figure of a Trickster-Creator is another case in point. Across Amazonia, this powerful being combines human and non-human properties. This is reminiscent of the “trickster” among the Kalapalo of the Xingu region in Brazil discussed by Basso (1987), and the grotesque creators across Amerindian domain (Lagrou 2006). The general analytic framework of the concept of “trickster” goes back to Radin (1972 (1956)). Among the Tariana of the Vaupés River Basin, the Trickster-Creator, *Yapi-riku-ri* (lit. bone-LOCATIVE-NOMINALIZER, ‘the one on the bone’) is often represented as a bird *Wanali* ‘carará bird’ (*Anhinga Anhinga*) and referred to as *Wanali Yapirikuri*. The figure of *Yapirikuri* shares

numerous features with *Iñápi-riku-li* ‘Made-from-bone’ of the Baniwa of Içana-Kurripako groups (who speak a closely related language). The Trickster-Creator is “an omniscient, powerful being who always anticipates the treachery and deceit of other beings” (Hill 2009: xi) and never offers humans anything in a direct way. For example, to obtain tobacco, the daughter of the Creator has to send her son to Wanali, who then feeds it to him and makes him vomit. The tobacco plant sprouts out of his vomit, and this is how the people obtain the desired goods. Nothing is straightforward – and this takes us to a further aspect of perspectivism: the change of shape or outer covering, disguising or revealing the underlying nature of an entity.

2.2 “Entering the skin”: The language of Amazonian disguise

As Carlin (2018: 315) put it, “reading the oral traditions of Amazonian peoples, one runs the gauntlet of trying to determine whether a given protagonist is really that which is expressed by the nominal, that is, is Jaguar really a jaguar or perhaps a spirit in jaguar clothes?”.

Transformations and interactions between double, or multiple, realizations of the entity are reflected in the multiple identities of powerful shamans – see, for instance, Lima (1996) on shamans-peccaries among the Juruna of the Xingu region, Reichel-Dolmatoff (1985) on the double nature of tapir as a spirit, and Wright (2013) on jaguar-shamans in Northwest Amazonia.

Amazonian languages employ a number of grammatical mechanisms to express the process of transformation, from one visual form to another. In Carlin’s (2018: 316) words,

built into the Cariban languages, however, is a grammatical truth-tracking system that allows us to know whether a protagonist is in essence that expressed in the noun – for example, jaguar – or whether s/he is intrinsically something else entirely, and simply appearing in jaguar clothes having undergone a transformation of some sort. Such nominal marking for transformation of state has been termed ‘similative’ or ‘facsimile’.

Across the Cariban languages, the meaning of a similative marker is “being for all intents and purposes X but not in essence so” (Carlin 2004: 124). The form is *-me* (or *-pe*) across the family. For instance, the Trio form *witoto* means “a human being”. If marked with *-me*, the resulting *witoto-me* refers to “a manifestly but not inherently a human being” (Carlin 2004: 123–130, 2006: 328–330). The

suffix is always used to describe a transient state, especially in constructions involving transformations. An example from Trio is in Example (1).³

- (1) *kaikui-me tēmetae* *Trio*
jaguar-SIMIL he.transformed
 ‘He transformed into a jaguar.’

Mawayana, a moribund Arawak language, spoken by a few elders in Trio and Waiwai-speaking villages, has developed a suffix with a similar meaning, out of its own resources. This is illustrated in (2).

- (2) *waata-ni r-ayãđĩyã* *Mawayana*
oppossum-SIMIL 3sg-transform.PAST
 ‘He changed into an opossum.’

The meanings and the functions of the suffix *-ni* in Mawayana mirror those contexts in Trio and in Waiwai where transformations are seen to have occurred between the world of humans and that of spirits in animal disguise.

A transformation from one visual form into another involves entering a “skin” or “clothing”. Numerous Amazonian languages with extensive systems of classifiers have a special form for extended piece of cloth which can refer to an “outward appearance” in transformative contexts.

The Tariana classifier *-maka* ‘extended piece of cloth’ is the case in point. The classifier itself goes back to an independent root Proto-Arawak **-maka* ‘hammock, clothing, flat item’. Incidentally, this is cognate to the well-known word *hammock*, first attested in English in 1555, “a hanging bed, consisting of a large piece of canvas, netting, etc. suspended by cords at both ends; used especially by sailors on board ship, also in hot climates or seasons on land”. The word stems from Spanish *hamaca* (first attested in 1519), from the Taino language of Hispaniola, the oldest recorded language of the Arawak family. This form reflects the proto-Arawak root *-maka* ‘stretch of cloth; clothing; hammock’ and a dummy prefix *(h)a-* (Aikhenvald 2015: 64).

To describe someone changing their outer appearance, one would say (3). This is a way of referring to a person taking on the outer appearance, or entering

³ 1, 2, 3 – first, second, third person; CL classifier; FOC.A/S focussed subject; PAST past (no abbreviation), sg singular, sgnf singular non-feminine, SIMIL simulative, PRES.VIS present visual, REM.PAST.REP remote past reported, REM.PAST.VIS remote past visual, TOP.NON.A/S topical non-subject.

the ‘clothing’, of an evil spirit. The example comes from a story cast in remote past reported evidential.

- (3) iñe-maka dhe-pidana *Tariana*
 evil.spirit-CL:CLOTH 3sgnf+enter.enclosed.space-REM.PAST.REP
 ‘He took on the appearance of an evil spirit.’ (lit. entered the clothing of
 an evil spirit)

In contrast, if someone changes their nature and becomes something else in their essence, the classifier for ‘clothing’ is no longer needed. The Tariana are now devout Catholics (Catholicism has been established in the area since the late 19th century). Example (4) describes what happened to a former priest, who subsequently got married and left the priesthood. The man entered ‘evil-spirit-hood’ for ever – he had changed his nature and not just the outer shape and covering. The speaker had seen the former priest marry and become an evil spirit, hence the use of the remote past visual evidential. Tariana has five evidentials – visual, nonvisual, inferred, assumed, and reported (Aikhenvald 2003: 293–310).

- (4) iñe dhe-na *Tariana*
 evil.spirit 3sgnf+enter.enclosed.space-REM.PAST.VIS
 ‘He has entered evil-spirithood.’

As is typical across the Amazonian northwest, Tariana shamans are known to have the potential of transforming themselves into a jaguar which is not “just” outer covering. A jaguar is their intrinsic “double” (in the sense of Lima 1996) and a facet of their nature (a comprehensive discussion of jaguar-shamans is in Wright 2013). This was described as (5) (from a story cast in the remote past reported evidential).

- (5) yawi dhe-pidana *Tariana*
 jaguar 3sgnf+enter.enclosed.space-REM.PAST.REP
 ‘He became a jaguar; entered jaguar-hood.’

We thus have a grammatical mechanism to express the two facets of transformations. A transformation which involves taking on the visible features, or ‘clothing’, of something else involves the classifier for ‘clothing’. A transformation which involves entering another essence does not require a mention of clothing. The jaguar in Example (5) is the shaman himself, not just an outer appearance.

Seeing things differently from different perspectives is reflected in another construction in Tariana, which appears to be unique across Amazonian languages.

another and the capacity to tease apart the essence and the outer “covering” relate to the shamanic powers. A powerful shaman or a spirit will be able to see what a common human cannot – the human essence of those in non-human disguise, or the other way around. The power of access to visual information correlates with manipulating evidentials, and the ways in which one perceives things.

Evidentiality – grammatical marking of information source – is a common feature of many Amazonian languages (see Aikhenvald 2015: 248–78, for an overview). In Carlin’s (2018: 316) words,

source of information, and in particular visual input, as well as speaker’s attitude towards the information given in an utterance is paramount. [. . .] The Cariban languages both afford us, or indeed even demand, a great deal of specification, precision and clarity of reference to states of being, knowledge and source of information.

Obligatory expression of how one knows things in numerous Amazonian languages is a correlate of a requirement of being precise in expressing the information source (see, for instance, Carlin 2018, Eberhard 2018, Stenzel and Gomez-Imbert 2018, Barnes 1984, and a summary in Aikhenvald 2015: 276–278 and 2021: 192–209). The shaman is licensed to use the visual evidential when talking about their own prophetic dreams, their own actions, and events in the spirit world. A common mortal is not – and if they do so, they make themselves vulnerable to potential accusations of hidden access to unseen powers. Across Amazonia, shamanic actions and spirit attacks are described by common mortals as unseen (in contrast to the actions of common mortals, including a priest in Example 3).

Precision in how one knows things can be contrasted by the apparent lack thereof in another domain. A notable feature that sets Amazonian cultures apart from those of the Andean peoples is the consistent lack of a large system of number words, and the lack of a counting routine (see a summary in Aikhenvald 2015: 355–357, Wojtylak 2020). Most Amazonian languages have a small set of lexical numbers, typically, one, two and three. Larger numbers tend to be borrowed. Quite a few languages do not seem to have had a counting system before contact with Europeans. Counting was simply not a cultural practice. What has been reinterpreted as ‘one’ used to mean ‘be alone’, as appears to have been the case in Jarawara (Dixon 2004: 559–560, 2012: 71–73), Xavante (a Jê language), and also Matsigenka and other Campa languages (Johnson 2003: 153, Mihas 2015) and Sirionó, a Tupí-Guaraní language of Bolivia (Holmberg 1985: 121), to name a few (see also Aikhenvald 2015: 349–355). What was reinterpreted as ‘two’ used to mean ‘be a pair’ as in Jarawara, an Arawá language, or ‘be the same’, as in Jabutí, a member of the small Jabutí-Arikapu family from Brazil; and so on. The Hixkaryana, speakers of a Cariban language, are reported

to use their three basic number words *towenyxa* ‘one, alone, singly’, *asako* ‘two, a couple or so’ and *osorwawo* ‘three, a few’ ‘without precision as to quantity’ (Derbyshire 1985: 1). The vague application of counting is reflected in the Tariana origin myths: the ancestors of the Tariana – grandchildren of Thunder who emerged out of the drops of his blood – are alternatively referred to as two or three even within the same narrative.

Absence of a counting system and a counting routine does not imply lack of cognitive ability to differentiate quantities. In contrast to speakers of European and Andean languages with their exact counting systems, the Mundurukú, speakers of a Tupí language in northern Amazonia (Brazil), do not have a counting routine; there are no native number words beyond five, and the words translatable as ‘one’, ‘two’ or ‘three’ do not refer to exact quantities (much like the quantifier *couple* in English which may extend to three or more items). A well-known study by a team of psychologists (Pica et al. 2004), directed towards the Mundurukú, led to the conclusion that the people in fact do “have a capacity to mentally represent very large numbers of up to 80 dots, far beyond their naming range, and do not confuse numbers with other variables such as size and density”. In other words, “sophisticated numerical competence can be present in the absence of the well-developed lexicon of number words”. This competence allows any Mundurukú, be it a bilingual or a monolingual adult, or a young child who never learnt any formal arithmetic, to spontaneously perform addition, subtraction, and comparison of quantities. All humans have an innate capacity to perceive different numbers and different quantities, and ultimately to count. The lack of “crystallized” terms for discrete numbers in many Amazonian languages can be seen a gap in the inventory of cultural items (further discussion of number words and counting systems across Amazonia and other regions, and further references, are in Aikhenvald 2015: 350–359 and Dixon 2012: 71–80). The existence of perceivable gaps could also be the reason why Spanish and Portuguese counting systems are quickly mastered and used by the Amazonian peoples, once exact counting becomes a necessity – for instance, in situations where the use of money is important, or quantities of land and property are disputed, or the exact age of a person has to be indicated for the national census or the issuance of identity cards and old age pensions.

Approximation and deliberate vagueness in approaches to quantity among Amazonians are the reverse of the cultural requirement for precision in how one knows things. One is precise in delineating the source of knowledge – where lack of precision may lead to dangerous accusations. But one remains vague where there is no need to be explicit. Could this be considered another facet of perspectivism at large, across the whole of Amazonia? This is a question for further study.

3 Disguise and transformations: The language of Amazonian perspectivism

Amazonia is undoubtedly the locus of almost unprecedented linguistic and cultural diversity, paralleled only by the island of New Guinea. And yet we can trace a few typically Amazonian phenomena, the common threads which transcend the boundaries of distinct languages and cultures. Among these are the shared ontological stance known as Amazonian perspectivism – the underlying primordial unity of humans and other entities. This is reflected in the choice of linguistic features – genders and classifiers. The transformation of a visual form and its disguise are mirrored in the concept of clothing or outer skin visible – albeit in different representations – to those who have special powers of seeing. The double, or even multiple, nature of entities – including jaguar-shamans and peccary-shamans – is expressed through a number of grammatical means. These include similitive markers, specific classifiers, and an unusual double case-construction expressing multiple perspectives for multiple perceivers. The requirement to be precise in how one talks about what one knows permeates Amazonian cultures, alongside its opposite: the vagueness and deliberate lack of precision in determining quantities via poorly developed systems of traditional number words.

The intricate fabrics of traditional languages offer insights into the ways people conceptualize the world around them. The common threads of Amazonian perspectivism form part and parcel of the rich mosaic of concepts, narratives, and communication patterns which can still be documented before they slide into oblivion.

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