Ernst Halbmayer*

Amerindian mereology:
Animism, analogy, and the multiverse

Abstract: This paper develops the assumption that different ontologies go hand in hand with different mereological relations between parts and wholes and between multiplicity and singularity. It explores these relations among Carib-speaking Amerindians. In the process, an ontology that goes beyond the animic inversion of the nature/culture divide and an irreducible difference of perspectives is identified. It shows the importance of analogies between micro- and macro-cosmological orders, which, however, do not form encompassing totalities or an integrated universe. Further, a logic of partial encompassment is identified, commonly going hand in hand with multiple beings and a multiverse of co-existent worlds among Carib-speaking Amerindians.
Keywords: Carib-speaking Amerindians, mereology, multiverse, partial encompassment, animism, analogism.

Resumen: En este trabajo se desarrolla la hipótesis que diferentes ontologías van de la mano de diferentes relaciones mereológicas entre partes y totalidades así como entre la multiplicidad y la singularidad. Se indaga estas relaciones entre los amerindios caribe-hablantes, identificándose una ontología que va más allá de la inversión anímica de la división naturaleza/cultura y una diferencia irreducible de perspectivas. Muestra la importancia de las analogías entre las órdenes micro y macro-cosmológicas que, sin embargo, no forman totalidades integrales o un universo integrado. Mucho más se identifica una lógica de abarcamiento parcial, que con frecuencia va de la mano de múltiples seres y un multiverso de mundos coexistentes entre los amerindios caribe-hablantes.
Palabras clave: Amerindios caribe-hablantes, mereología, multiverso, inclusión parcial, animismo, analogismo.

* Ernst Halbmayer is professor for cultural and social anthropology at the Department for Comparative Cultural Research at the University of Marburg. He received his Ph.D and his habilitation at Vienna University. His ethnographic work is focusing on the Yukpa in Venezuela and Colombia, the Carib-speaking Amerindians and most recently on the ethnography of the "intermediate zone" between the Andes, Amazonia and Mesoamerica.

The aim of this paper is to rethink some central notions and assumptions in the current reflexions on ontologies, especially the animist ontology which is most commonly associated with Lowland South America.[1] Ontological approaches in anthropology have demonstrated that the fundamental categories of what exists, the structures of the world and the corresponding schemata of praxis may differ significantly (Descola 2011; Viveiros de Castro 1998). Consequently, different ontologies have been identified and a need for richer ontologies has been formulated (Viveiros de Castro 2004: 484). I will start from the basic assumption that if there are different ontologies and not just one nature of being in the world, it is likely that there are also different mereologies,[2] that is, more than one way of conceiving and conceptualizing relations between parts and wholes. In this paper, I will analyze the relationship between specific forms of multiple entities and their parts in order to understand ontological notions among Carib-speaking groups.

Therefore, naturalism, with its distinction of nature and culture or society, and of the material versus the immaterial, is just one ontology among others. Since the enlightenment, naturalism has nevertheless been taken for granted and considered rational and objective. Other cosmologies appeared as wrong, bizarre and exotic views of the world based on primitive and childish mentalities and on irrational assumptions. By discussing the motion "Ontology is just another word for culture" (which was then rejected), the reconstituted Group for Debates in Anthropological Theory (2010) illustrated the basic differences between an ontological and a culturalistic position. Martin Holbraad strongly summarizes the dissimilarity of an ontological and a cultural approach by stating:

> So what makes the ontological approach to alterity not only pretty different from the culturalist one, but also rather better, is that it gets us out of the absurd position of thinking that [...] they get (the) stuff wrong. [...] the fact that the people we study may say or do things that to us appear as wrong just indicates that we have reached the limits of our own conceptual repertoire. [...] we have grounds to suspect that there is something wrong with our ability to describe what others are saying, rather than with what they are actually saying, about which we a fortiori know nothing other than our own misunderstanding. The anthropological task, then, is not to account for why ethnographic data are as they are, but rather to understand what they are – instead of explanation or interpretation, what is called for is conceptualization. [...] Rather than using our own analytical concepts to make sense of a given ethnography (explanation, interpretation), we use the ethnography to rethink our analytical concepts (Carrithers et al. 2010: 184).

---

1   I would like to thank Bernd Brabec and Eithne Carlin for inspiring comments and suggestions.
2   From the Greek *meros*, "part", parthood relations.

Although various approaches are still focusing on epistemology, and the naturalistic and mentalist justification of other world-views (Guthrie 1993), Viveiros de Castro convincingly replied to Bird-David (1999), that "Animism is surely an ontology, concerned with being and not with how we come to know it" (1999: 79). Animism, as well as other ontologies, is a mode of existence and a form of being which constitutes specific persons and worlds. By means of these ontologically rethought analytical concepts, among others, the old debate between universalism (the existence of a single reality following general laws) and relativism (the assumption that reality is multiple and culturally specific) has been reformulated by arguing for the existence of a limited set of distinct ontologies that constitute specific worlds.

In the course of my argument it will appear that different ontological perspectives can communicate with one another and therefore are not necessarily entirely incompatible. To a large extent, cosmologies are able to integrate different ontological positions, at least at their peripheries. For instance, the core of Lowland Amerindian cosmologies is based on animic assumptions. However, among Carib-speaking groups also clearly developed aspects of analogism are visible, connecting the person, the houses' architecture and the settlements' layout, and the cosmos. Animic cosmologies also know animals and plants that are not commonly thought to be personalized and humanized and which are perceived in ways that resemble naturalistic positions, or notions of nature. In contrast, although naturalism is the dominant ontology of our own cosmology, there are areas and contexts – inspired by esoteric reasoning, for example – where animic or analogic concepts and practices emerge.

By drawing on my previous work on Carib-speaking Amerindians (see Halbmayer 2010) I am going to develop some theses about the analogy between micro- and macro-cosmos in terms of partial encompassment and fractality a step further. Thereby I will refer to Descola's (2011) inspiring differentiation of four ontologies (animism, totemism, naturalism and analogism), as well as to current reflections on (dividual, composite, fractal) Amazonian persons (Viveiros de Castro 2001; Kelly 2005; Vilaça 2005, 2011; Santos-Granero 2009) and their relationship with the macro-cosmos (see Halbmayer 2010).

Many cosmologies of Carib-speaking Amerindians show both animic and clearly analogical characteristics, but the latter are in general not integrated in a holistic and encompassing manner, which would be typical for analogism. These cosmologies do not create encompassing totalities or an integrated universe, but a multiverse of co-existing worlds relying on a specific form of non-totalizing partial encompassment. I will show that this is more than a simple asymmetry of perspectives and less than an integrated encompassing totality.

1. Animic theories and hierarchical inversion

Two central and fundamental aspects of those cosmologies generally labeled as "new animism", or "animic" (e.g. Bird-David 1999; Viveiros de Castro 1998; Descola 2011; Costa & Fausto 2010) are:

1. There exist other than human persons. Animation, agentivity, reflexivity and intentionality are not restricted to humans but commonly attributed also to objects, spirits and natural phenomena.[3]
2. In animic ontologies, relations and interactions with these persons as well as animated forms of agentivity are maintained, including communication, mutual understanding and the possibility of transforming into and becoming the other.

Despite these assumptions, areas of non-personalized "nature" may exist in animic ontologies (see Descola 1994), and perspectivism does not involve all animal species (Viveiros de Castro 1998: 471). However, in sum it can be stated that animals are people. It is neither necessary to belong to the human species to be a person (as important animals and plants are also personified to different degrees, they are *like* humans),[4] nor is it necessary to be a plant or animal to be animated and to have agentivity. In addition, spirits and (some) objects are animated, have different grades of agentivity and intentionality (see Guss 1989; Velthem 2003; Santos-Granero 2009; Goulard & Karadimas 2011). Practically we seem to be confronted with graduated systems of animation, agentivity and reflexivity which in most cases still need to be explored in more detail.

According to these minimal assumptions, an animic ontology is relational. It crosses the naturalistic nature/culture divide (where the relationship toward animals and plants is generally instrumental, excluding most options for communicative interactions based on mutual understanding with aspects of what we call nature).[5] On a higher classificatory level, however, the nature/culture distinction is retained in current theories which may be called "inversionist", as they understand animism as a hierarchical inversion of naturalism (Viveiros de Castro 1998; Descola 2011).[6] While

---

3   Turner (2009) recently argued that these persons and beings are not necessarily human in the sense suggested by animism and perspectivism. I propose that their ontological status should be inquired empirically by focusing on the linguistic constructions such as for example agentivity, animacy and possession.

4   Among the Yukpa, where I conducted most of my fieldwork, animals are not Yukpa but they once were *Yukpa-pe*, "Yukpa-like".

5   For such a rational, enlightened and naturalistic view see Habermas (1988: 369ff.).

6   See Descola for a distinction between animism and perspectivism as a specific version of animism:

the distinction between nature (physicality) and culture (interiority) is retained,[7] its relationship is hierarchically reversed:[8] nature encompasses culture in naturalism, and the relations between society and nature are themselves natural. Nature or physicality is considered the unmarked state and common ground that unites all beings, from which multiple cultures, or a so-called multiculturalism, emerge. By contrast, in animic ontologies, culture, spirit or interiority encompasses nature.

> Animism could be defined as an ontology which postulates the social character of relations between humans and non-humans: the space between nature and society is itself social (Viveiros de Castro 1998: 473).

Therefore culture is no longer a privilege of humans (Descola 2011: 202).

A common spiritual interiority is the unmarked state and the common ground that unites beings beyond humans. From this common ground, multiple natures, or a so-called multinaturalism emerge, as the principle for differentiating diverse beings.

2. Shared content, different forms and transformation

In Viveiros de Castro's multinaturalism bodies are not "physiological differences" but rather "affects, dispositions or capacities which render the body of every species unique". The body is "a bundle of affects and capacities [...] which is the origin of perspectives" (1998: 478). Descola takes a different position by arguing that the physical distinctions are not distinctions of substance[9] (substance in this sense circulates in form of food, energy and life-force between different kinds of species and across the cosmos), but distinctions of form, or, more specifically, of the form of physicality (Descola 2011: 198-199).

Therefore, it seems that the distinction of physicality and interiority, which may be understood as an expression of the nature/culture distinction, is cross-cut by a

---

  In perspectivism non-humans see humans as non-humans whereas in general animism non-humans see humans simply as humans (2011: 214).

7   As there "are already too many things which do not exist" (Viveiros de Castro 1998: 470).

8   In the sense of Dumont (1980: 43) as a form of hierarchical opposition, where one part of the distinction encompasses its opposite, thereby forming a totality.

9   Viveiros de Castro argued at least in the German version of his widely cited paper on perspectivism "Mein etwas schlaffer Gebrauch von ‚Seele' und ‚Geist' als analoge Begriffe beruht indessen auf der Überzeugung, dass diese Wörter einen *semantisch kontinuierlichen* Bereich abdecken, der in einer radikalen Diskontinuität zum semantischen Bereich steht, der von den Begriffen wie ‚Körper', ‚Materie' und (in ihren modernen und nicht-philosophischen Verwendungen) ‚Substanz' steht" (1997: 100). ("My somewhat flabby use of 'soul' and 'spirit' as analogous terms, however, is based on the conviction that these words cover a *semantically continuous* range, standing in a radical discontinuity to the semantic range covered by the terms such as 'body', 'matter' and (in its modern and non-philosophical uses) 'substance'").

distinction of form and content. Humans and animals within animist ontology share a common interiority or cultural ground as well as substance, which would – from a naturalistic position – be considered as physicality. In animism, physical difference is one of form but not of substance. Cultural similarity, on the other hand, seems to manifest in content expressing itself in different forms (e.g., jaguars drink blood, while humans drink manioc beer). Consequently, if physical sameness through (shared) consumption of food is produced across species, or if underlying cultural similarity assumes identical forms, problems may arise. Obviously, these are the points where transformations between different species intentionally or unintentionally occur.

Carib-speaking groups use at least three different non-exclusive idioms to express differences and potential influences between species (see Halbmayer 2010: 587-589). The "spiritual" one is focusing on the contact and exchange of "soul(s)" and "soul matter", which have a broad meaning from double, shadow, specter to life force, energy, or light deriving from sun and radiating through the cosmos, inherent in all living things. A second "physical form-logical" idiom, seems to be based on the idea that different species are established by the distribution of different physical attributes (like teeth, claws or more or less colorful clothes). But physical attributes may also be transferred across species through spiritual contact (see Fock 1963: 17 for the Waiwai) or the consumption of meat. The Yukpa developed a whole series of such statements: sloth's meat would cause a child to be born with only two fingers, anteater's meat would cause a small and pointed mouth, the consumption of armadillo would cause small circuited eyes, etc. (Halbmayer 1999). The third idiom is a humoral pathological substance etiology of diseases based on the classification of substances.[10] Butt Colson has shown that the categories of sweet/bitter and cold/hot are in the center of such logic among the Akawaio. She writes:

> Sweet foods 'cause blood', which is itself classified as sweet. Since bleeding must be reduced at the time of, and after, birth, sweet foods which encourage bleeding have to be avoided. Blood is also classified as cold. Cold liquids and foods must be avoided too and it is said that 'the stomach must not have cold things'. According to one informant, 'all food must be warm: cold food would kill the mother' (Butt Colson 1975: 292; see also 1976).

Also Patrick Menget's analysis of couvade among the Ikpeng relies on a comparable logic (1979). It is neither the spirit or soul nor the form but the quality, strength and polarity of substances that is the idiom in which the avoidances are expressed. A specific taboo can therefore be formulated in these three different idioms: the

10   Descola considers such logic as typical for analogism (2011: 325f).

consumption of tapir meat is prohibited a) because of the dangerous animal's spirit, b) due to the clumsiness of the tapir, which would be transferred to the child, or c) because of the strong features (humors) of his flesh. In all three cases, the physical condition of the person, her well-being, balance and appearance, but also illness and pain communicate the results of consciously or unconsciously established relationships. A radical discontinuity between soul and matter or spirit and substance is evidently not always given.

3. From hierarchical oppositions to 2nd order classifications and fractals

In addition to naturalims and animism, Descola identifies two more ontologies: totemism, where a hybrid identity between specific natural species and specific human groups in terms of physicality *and* interiority is established,[11] and analogism, where graduated differences in terms of interiority *and* physicality are established and bridged by analogies between different levels of existence and beings. His overarching schema integrating the four ontologies is based on a second order nature/culture (physicality/interiority) distinction. While naturalism and animism are understood as hierarchically encompassed, offering differing versions respectively of the nature/culture distinction, totemism and analogism systematically cross this distinction by creating either hybrid identities between humans and non-humans at the spiritual and physical level, or analogies bridging graduated differences on both levels.

According to this theory animism produces autonomous isomorph collectives[12] for each species, and naturalism produces different collectives (cultures) among humans, excluding non-humans. Totemism, so Descola, produces common isomorph and complementary collectives of humans and non-humans, while analogism establishes ranked collectives of humans and non-humans organized in different segments of the world. Such a conceptualization of different collectives is an attempt to overcome the great western divide between nature and culture and the practices of purification (Latour 1991) that go hand in hand with it.

However, in the current anthropological discussion on ontologies in relation to South America, a certain paradox may be observed. While in philosophy, mereology (the study of parts and wholes and their relationship to one another) is an established branch of formal ontology, in anthropology, especially in South American anthro-

---

11   Whereas the relations toward animals outside this form of identification remain largely unspecified.

12   For the terms collective, describing not just associations among humans but of humans and non-humans, see Latour 1991.

pology, terms like "mereology", "mereologic" or Strathern's term of "merography"[13] (Strathern 1992: 72-73) are hardly ever mentioned, despite an intense theorization of ontologies.[14] One could speculate that this avoidance might be related to the fact that animism is conceptualized as an inversion of naturalistic nature/culture distinction and that consequently each species is forming a collective of its own. Such a relationship of parts and wholes might pass as largely commensurable with part/whole relationships we are used to. In other words, the major and inspiring attempts to overcome the great western divide between nature and culture limit their full impact by re-inscribing the nature/culture difference in notions of parthood.

The main difference of animism and naturalism is also reproduced at the level of the person. Humans themselves become nature/culture dividuals in the current theorization. As Vilaça argues, based on Viveiros de Castro (2001), Strathern's concept of a composite Melanesian dividual based on gender differences (Strathern 1988) takes on a specific human/non-human form in Amazonia. "While Melanesia reveals dividuals conceived as male and female, in Amazonia we are faced with dividuals conveived as human and non-human (or body and soul)" (Vilaça 2005: 453; see also Vilaça 2011: 248-249; Viveiros de Castro 2001: 33).

In contrast, following my own analysis of the Carib-speaking groups, it appears that persons should not be understood as dividuals reproducing a nature/culture or body/soul distinction.[15] Rather we are confronted with dividuals reproducing multiple distinctions or an internal multiplicity going beyond a binary distinction (Halbmayer 2010: 594). We are confronted with multi-dividuals or multividuals, multiply partible persons beyond an undividable individual or a dualist dividual.

4. Rethinking analytical concepts: Person, house and cosmos

More than thirty years ago, Strathern (1980) argued "No nature, no culture". However, we still seem to be trapped in a paradox regarding binary concepts of nature/ culture and body/soul. We know that the nature/culture, body/soul, physicality/ spirituality distinctions are specific expressions of a naturalist ontology. At the same time, current theories re-inscribe these distinctions – although significantly transformed – into other ontologies, or frame the difference between ontologies in terms of these distinctions. They use the nature/culture distinction to explain how other ontologies cross this divide, which is finally alien to them.

---

13 A mode of exposition of partial relations or "the English view that anything may be part of something else" (Strathern 1992: 73).
14 But see for example with a different focus Thornton (1988) and Zeitlyn (2009).
15 Although in some cases like the Yukpa we come close to such a distinction, generally we are confronted with beings encompassing an internal and external multiplicity.

Which picture would emerge if we were to start looking for recurring similarities at different scales? Among Carib-speaking groups, human persons themselves are often considered a house, accommodating different spiritual aspects located in different body parts or organs such as the eyes or the heart. During sickness and in dreams, these parts may leave the body. When a person dies and definitively disintegrates, these different aspects are set free. The head or eye part travels to the sky, other parts settle in the caves or mountains and yet others transform into animals. Hence we are confronted with a form of differentiation that reproduces an internal multiplicity which is generally not reducible to a binary distinction. This internal multiplicity partially reproduces itself at different levels, between different worlds (or cosmological layers), and within this visible world outside the human person.

It therefore would be quite misleading to view Wayana, Trio, Yekuana or Pemon persons, amongst others, from a body-soul perspective. Ethnographic evidence shows that in many cases, multiple spiritual aspects locate themselves in and even – like in the case of analogism (Descola 2011: 301ff) – outside the indigenous bodies. The Yekuana are maybe the best-known example for people with a multitude of *akato* doubles. They distinguish six souls of which only two reside within the body, in particular the heart-soul (*ayewana akano akato)* and the eye-soul (*ayenudu akano akato)*. These return to heaven after death and are responsible for dreaming (Guss 1989: 50). Additionally there are other *akatos*, such as the *akato* in the moon (*nuna awono akato)*, the *akato* in the sun (s*hi awono akato),* the *akatos* in the water and the *akato* on earth.

For the Pemon and Kapon, the body's life-force is likewise associated with Sun's light and referred to as *akwaru* (Kapon) or *ekaton* (Pemon). This particular vitality is also located in different body parts.

> One of the three principal souls, the kamong, or shadow soul, leaves a person's body upon death and goes to the mountaintops, adding to the number of the mawari. The mawari are stealers of the tyekaton soul (heart soul or breath soul), and it is the loss of the tyekaton soul which can cause illness. If the tyekaton soul, which can be stolen or go wandering from the body in dreams, is not recovered in time, death will result. One old shaman averred that people have at least three principal souls: the tyekaton soul, the kamong soul, and the enuto, or eye soul, which can be seen as a very small man deep in the pupil of the eye. He said that the tyekaton soul normally goes to the sky, or to God (he used the Spanish word Dios at that point) when a person dies, while the kamong soul goes to the mawari (Thomas 1982: 142).

Among the Pemon Mawari are spirits living in the forest or in mountains.[16] A person's different spiritual aspects therefore reproduce *parts* of the cosmological structure and thereby humans relate to the different planes of the cosmos. The body and its common division into torso, head and extremities may also be related to different layers of the world (*imno* the sky, *epi* the world that forms a membrane toward the surrounding waterworld *wapara*), as Teixeiro-Pinto (1997) showed for the Carib-speaking Arara.
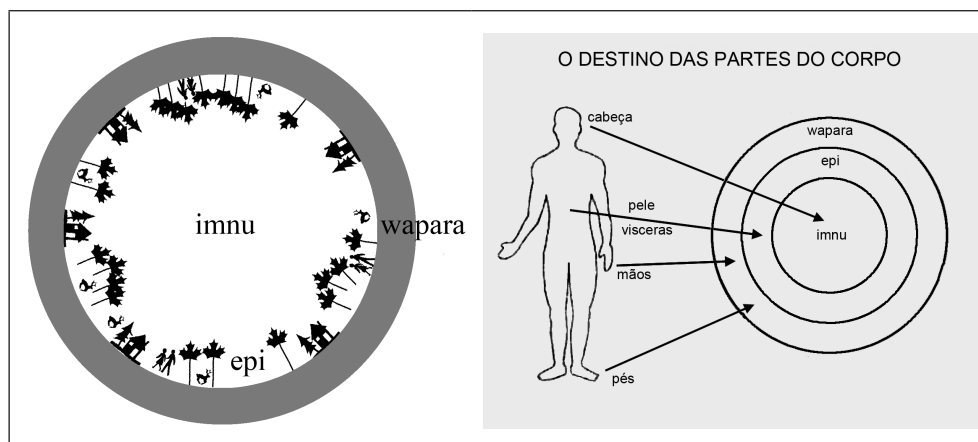

Figure 1. The cosmological layout and the destiny of body parts.
Redrawn from: Teixeira-Pinto 1997.

The associated body parts transform into different beings after death which then go to respectively different layers of the world (Teixeiro Pinto 1997: 165f; Halbmayer 2010: 357f).

Among Carib-speaking groups, other-than-human persons are well known, as well as other-than-human houses, villages and other-than-human social species. Accordingly, being a human is not a prerequisite for living in a house, for performing specific ways of living, eating, feasting or singing. The notion of human-like species goes beyond animals and may include plants, like trees, especially if they have powers to heal or to poison, or, like maize or manioc, serve as basic food. Also stars, constellations, or rainbows are frequently considered such human-like persons. Stones as well may be powerful and associated with specific spirits. Therefore they are placed at specific locations, where they are cared for. Such stones may be used to

---

16   Among the Waiwai and Mawayana Mawari is a culture hero.

attract animals and garden products (Butt 1966/67). Even if they are not considered to be persons or humans, they obviously have agentivity, power and incorporate certain aspects of animicy.

4.1. Human like-persons: Proto-, ex- and non-humans

There also exist other than human persons. These persons are not necessarily humans but more or less human-like (see also Brabec this volume). Generally speaking, there are at least three forms of human-like persons: proto-humans, ex-humans, or non-humans. Pre- or proto-humans are usually powerful, sometimes trickster-like beings that fabricated or manufactured the first humans. From these first humans, animals were differentiated later on (for example *Amouritsha* who made the first women out of a *manüratsha* tree among the Yukpa, or *Kwatïngï* who fabricated the human sub-stitute daughters out of a tree trunk and natural materials among the Kalapalo, see Basso 1987a: 24 and Halbmayer 2010: 423f).

Santos-Granero recently focussed on the topic of the manufacture of persons and reasoned that in Amazonia, creation is usually a process of transformation of given entities. Consequently, humans generally are composite beings. People and objects share the same "symbolic frame of fabrication" (Santos-Granero 2009: 6). He further argued that "we are forced to conclude that the model of the human body is not the body of animals but rather the body of artifacts" (2009: 7). To that effect, the artifac-tual mode of production/reproduction would be prior to genital (2009: 8). Among the Carib-speaking groups such a fabrication is not just producing composite beings but specifically human attributes, emotions and behaviour.

While humans and humanity have been fabricated by proto-human beings, ani-mals are generally considered to be ex-humans that became differentiated out of a common past humanity (see Viveiros de Castro 1998: 472, 2004: 465; Descola 2011: 201). Among the Yukpa this is conceived in terms of the distribution of dif-ferent physical qualities and bodily adornments (in the logic of fabricating physical differences), but also in terms of conflict between humans and animals leading to the separation of the latter. In former times, mutual understanding and communica-tion between these species was possible. This possibility was definitively lost since the human/animal separation, so that henceforth only shamans are able to willingly establish interspecies communication in general. But besides proto- and ex-humans we also find non-humans. In most of the cases, these are spiritual and often mon-strous beings which may appear in human-like form but developed from a different origin and possess non-human behaviour and morality. They lack a common shared humanity. The Arara were maybe most explicit about this idea. They distinguished between beings coming from the inside, and persons coming from the outside water-

world *wapara.* Beings from the inside would neither share substance or descent, nor ancestry with these waterworld beings. This category of beings included neighbouring Amerindian groups such as the Kalapalo[17] (Teixeira Pinto 1997: 136; Halbmayer 2010: 350-352).

In such a categorization of *human-like* beings, different relations are inscribed: one of fabrication and care (proto-humans – humans), one of a reversed evolution with humanity as common origin and a subsequent differentiation (humanity → humans/animal species) and non-humans appearing in human form.

4.2. Multiverses

In sociological terms, among Carib-speaking groups several cognatically organized units can be found, such as family hearth groups or settlement groups organized in houses, villages, river groups, etc. There are settlement places (*ata, pata*), houses and the different people that dwell in them. These "people/s" are often but not always marked by suffixes like *-yana*, *-koto* or *-komo*. In the conception of Carib-speaking groups they range from known human neighbours, to animal-peoples residing in the forest, bird or vulture-people with their *pata* in the sky-world or star-peoples. But they may also include what Magaña (1982) referred to as monstrous and unusual *razas plínicas* marked by their different physical appearances, like cephalopods with strikingly different habits and practices.

In the Carib-speaking Amerindians' conception, these peoples constitute and inhabit different worlds in a multiverse that sometimes includes several skyworlds, underworlds, the waterworld, or the world of the dead. The Yekuana, for example, distinguish eight skyworlds and three underworlds (Halbmayer 2010: 94-137), the Trio, according to Magaña (1987, 1990), four skyworlds. These worlds reproduce and locate themselves in the landscape, in the rivers, mountains, caves and the sky. Rapids, constellations and specific parts of the mountains are visible markers, dwelling places or houses of such peoples and junctures from and to these other worlds. Among the Yekuana and the Waiwai, the cosmological differentiation between these worlds reproduces itself typically in the architectural structure of the collective round house or the concentric village layout (Halbmayer 2010: 94-104, 249-258).

---

17   In contrast to this original understanding the Arara cooperate today with the Kayapo in the context of indigenous politics and the protests against the Bello Monte dam complex.
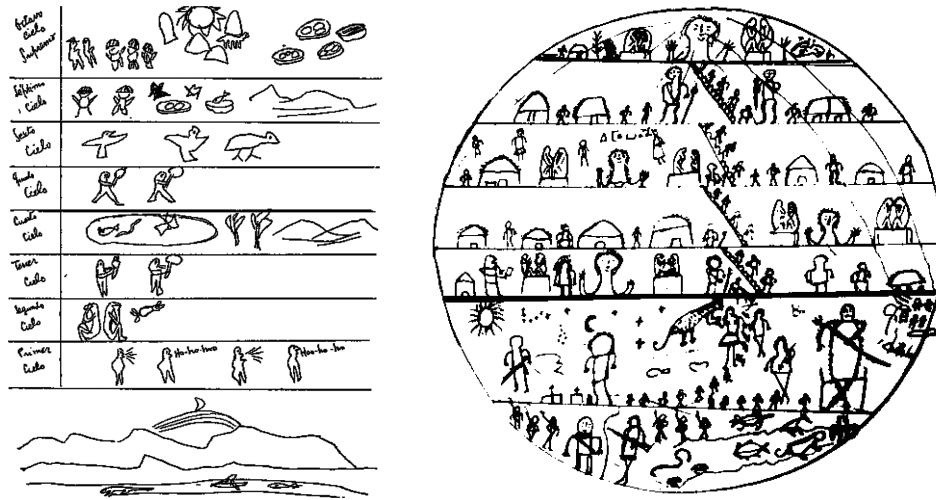
Figure 2. The Yekuana cosmos, drawn by Pedro Matakuni (12 years) (left, from Barandiarán 1979: 137) and Dawasehuwa (right, from Civrieux 1985: 57).

In Carib-speaking Amerindian cosmologies, the main task of differentiation does not occur in society as opposed to nature, but within the world, the house and the person as such. Carib-speaking cosmologies are, as is often the case in Amazonia, based on a model of the cosmos that distinguishes multiple worlds and different species of persons. Such cosmologies do not form an integrated universe, but a multiverse of coexisting and interrelated worlds. Being and acting in, as well as travelling to these worlds – as much as relating to these persons involved – is central for the effects of any interrelations which may be experienced or were once experienced ideally. However, knowledge about these worlds is not necessarily and exclusively gained in direct engagement and from a dwelling perspective.[18] It is also codified in narrations, rituals, music, and in talk about ways to deal with animals and plants, or ways to produce (Guss 1989; Velthem 2003) and to use objects (Rival 1996).

Rituals and music are not just media of intra-species communication but also media of transformation. Similarly, mythical narrations and daily talk do not just describe such transformations but demonstrate what happens if one deals with aspects of the world in an improper way. These experiences and the gained knowledge are exchanged and shared among humans, encoded in proper forms of behaviour, inscribed into the landscape, and therefore form the basis for proper engagement with the world.

18   For such an argumentation see e.g. Willerslev (2007).

Hunting and gardening always imply instrumental intervention into the environment, and thus constitute important ways of engaging with non-human others. Rituals, music, dreams, vision quests, weaving and carving may be equally powerful interactional and communicative tools to engage and relate with different others, human-like persons, houses, villages and peoples. Humans may knowingly or unknowingly enter the dwelling places of other beings in the forest or the mountains. Humans relate to them through the ingestion of food, through the circulation of substances or – even less material – of energy, light and life-force. The question therefore is not if other than instrumental relationships may be established with aspects we call nature, but how to establish them properly.

But how may the multiple relations toward other than human beings be consciously established, maintained and controlled? Also, how can potential harm resulting from such exchanges be avoided? Such interactions are controlled through specific forms of behaviour, avoidances, withdrawal, fasting and taboos as well as by demonstrations of respect, by conscious interventions and ritual transformations. These aim to establish temporary contact with the beings or their masters (Fausto 2008), but try to avoid an irreversible metamorphosis into the other (Monod Becquelin 1982). Moreover, the relationship with the cosmological structure is expressed in multiple souls and body parts associated with cosmological levels and relevant beings in various ways.

5. Forms of distinction

Facing these empirical examples, serious doubts may arise, questioning the assumption that Carib-speaking persons may be understood as binary body/soul dividuals. But what is the form of distinction we are confronted with in these examples? What is the relationship between parts and wholes underlying these examples? How do parts build up to a whole and in which ways is a whole differentiated, divided or split into parts?

Are fractal analogies, increasingly applied and developed in recent publications including my own work (Halbmayer 2010: 295-299), an answer to this problem? Such analogies are currently advanced in different directions including exchange logics (Kelly 2005), the theory of rhizomes (Viveiros de Castro 2010) and by metaphorical uses of the term fractal in regard to the human/nonhuman interface of an Amazonian "cosmic body", being considered the basis for an alternative modernity beyond the commodity relations of global history (Uzendoski 2010). These latter attempts refer to chaos theory (Mosko 2005; Wagner 2001, 2005), Appadurai's (1996) fractal notion of global culture (Uzendoski 2010: 46) and the Deleuzian rhizomatic theory (e.g. Viveiros de Castro 2010).

However, a strong relationship between binary reasoning and current notions of fractality may still be observed (Mosko 2005). The dualism between identity (non-affinity/consanguinity) and alterity (affinity), which in Viveiros de Castros words is fractally and endlessly reproduced at all levels of the system is a good example.

> Intra-personal and inter-personal relations are also 'co-extensive', [...], just as the socius is the person on a collective scale. In other words, this structure is fractal: a distinction between part and whole is meaningless (Viveiros de Castro 2001: 31).[19]

In such mereologies where every part is a whole and every whole a part, and this is repeated in a logic scale invariant self-similar, the parts and wholes are similar but still distinguished by scale.

Which mereologies do we apply to analyze and understand cultures and cosmologies and what are the distinctions we use to construct and differentiate ontologies? And in addition to that, how far do they relate to available empirical data? Let me focus on three areas where a bifurcation between current theories and empirical data may be observed, and a need for further research emerges.

Firstly, there is a need to explain the obvious abundance of analogical features within animist ontologies. Secondly, we will have to evaluate in which sense the import of notions of fractality may help to understand Amerindian mereologies. Are uses of fractal notions and references to chaos theory more than just new analogies imported from post-structuralist Western thought? Finally, we need to answer the question whether and how far specific Amerindian mereologies go beyond current inversions of the nature/culture divide and notions of self-recurring fractality.

Thereby we will have to keep in mind that such abstract theoretical considerations always reflect our own models. They are necessarily radical reductions of lived social and cultural complexity. Therefore the question is how to reduce complexity in a way the models may reflect the available data concerning the Amerindian persons, settlements and the cosmos?

---

19 Thereby Viveiros de Castro contradicts his original focus on hierarchical encompassment that led him to argue that Amazonian kinship systems are hierarchically encompassing affinity on the local level and are being hierarchically encompassed by potential or symbolic affinity and a symbolic economy of predation. In recent years he has been developing this fractal and rhizomatic Deleuzian position.

6. Scale invariant approximate self-similarity and non-self identical entities

If nature/culture is the great differentiator that divides the naturalistic ontology, while the mediating practice produces abounding nature/culture hybrids (Latour 1991), what may be the differentiator of the relational ontologies found among Carib-speaking groups? This ontology includes other than human persons, houses and villages, but also relies on a multiverse and constitutes human persons that *partially* reproduce the multiple distinctions on which their world and the multiverse are based on.

Obviously it has to be a differentiator that (re-)produces co-existing units in a basically non-hierarchically and non-totalizing manner that are at the same time similar and different to one another. Persons, houses, villages and peoples are conceptualized as basically similar, despite their obvious differences. However, they do not constitute an overarching unit that is more than the sum of its parts, despite their similarity. Their similarity is based on a double analogy across existing differences.

As I have argued elsewhere (Halbmayer 2004, 2010) such a form of differentiation does not produce a hierarchical encompassment in a Dumontian sense. It does not produce a totality, encompassing its difference as in the classical understanding. Mereologically speaking, there is no underlapping of parts under a common whole, just a partial overlapping of parts – a creative partial encompassment (Halbmayer 2010) – forming temporary and rather unstable units. These temporary and unstable units are internally multiple, but they are not more than the parts they originate from, but less. They are not formed by a totalizing encompassment but by partial encompassment, creating entities merely integrating parts of the aspects they rely on. As a consequence the encompassed aspects exist not just as parts of the units but also outside either in non-encompassed form or encompassed by other temporary entities.

Such non-totalizing entities, which may be human persons, villages, or even the visible world people are living in, result from partial overlapping. This leads to a paradoxical situation: such temporary units are at the same time different from the parts they integrate (since they exist also in non-integrated form or integrated by other entities) as they also intrinsically rely on and integrate these parts. Such an overlapping leads to a partial encompassment and such a partial encompassment produces a differentiation between integrated and non-integrated parts. This differentiation and the thereby created fuzzy borders hardly lead to stable and continually self-reproducing units. Rather such partial encompassment has to be actively main-

tained. Aspects of persons may get lost or be added. Villages may split or incorporate persons. The consequences are rather unstable and temporary units: persons, villages or even the multiverse which may collide in a cataclysm.[20]

Consequently there is a double similarity between units. Different entities may be based on similar forms of internal multiplicities and differentiation. The person, the house and the cosmos may show obvious signs of scale invariant approximate self-similarity. Such entities are connected to different outsides in multiple ways, and aspects of their internal multiplicity exist also in the exterior or within other entities. Therefore, multiple logics of establishing and/or avoiding contact, communication, exchange or predative appropriation exist. These very logics may then lead, among other things, to loss and illness, elaborated cosmological exchange logics, personal empowerment or the continuous production of a common corporality through incorporation of the same food. An important part of these cosmological exchange logics is formulated in terms of loss and appropriation of soul matter or substance. Among the northern Carib-speakers in the Guianas such exchange notions in terms of spirit and soul are common (variations of the terms *ekati, ekaton, okaton, or akato*, or *akwa, auka),*[21] but among the southern groups, like the Ikpeng, Arara and Bakairi, the spiritual dimension of souls is subordinated to a logic of substance (Menget 1979: 256). This vital substance is called *ekuru* and is found in all body liquids among the Arara and Bakairi (Teixeiro Pinto 1997: 159; Barros 1994).

However we may call such ontology relying on partial encompassment, we should be aware that most of our intellectual problems with the animation of non-animated things, the attribution of human qualities and spiritual aspects to non-humans, the possibility of communication and interaction with other-than-human persons point to the rationality of a naturalist ontology. Our problems with animism, for example, are not the problems of those who take such an animic ontology for granted. From within such an ontology, it is completely clear that communication and interaction with other-than-human persons may be achieved and how this is done. The main question inside the ontology is how reasonable exchange and communication across the borders of unstable and temporary entities and worlds may be managed without being permanently transformed into the other. Politics of fragile inter-species and multi-world border management become central in a world in which the avoidance and limitation of such contact and exchange is at least as important as its strategic establishment.

---

20 According to their cosmology, the Arara live in a post-cataclysmic world, where the original separation of *wapara*, *epi* and *emno* broke down (Teixeiro Pinto 1997; Halbmayer 2010: 351, 385-387).

21 But also the *akũa* among the Kalapalo, called "interactive self" by Basso (1987b).

7. Conclusion

The mereology of partial encompassment and the resulting multiple entities such as the multividuals and the multiverse obviously do not erase, or substitute core aspects of animism, but they reach beyond an hierarchical inversion of the nature/culture distinction and a logic were "the only asymmetry possible is internal to the difference between perspectives [...] that are never reducible one to the other" (Costa & Fausto 2010: 99). At the same time it differs from analogism as Carib-speaking cosmologies establish multiple analogical correlations between the micro- and the macro-level but not a holistic and total(itarian) ideology based on hierarchical encompassment (Descola 2011: 340). Their cosmologies do not create encompassing totalities or an integrated universe, but, as I am arguing, a multiverse of co-existing and multiply connected worlds relying on a specific form of non-totalizing partial encompassment.

We are confronted with an ontology producing multiple analogies and scale invariant forms of approximate self-similarity, while the entities resulting from partial encompassment are multiple and therefore basically not self-identical. Consequently, fractal analogies work, but they do so only to certain extent. A basket, a person, a house, or the visible world is not just a basket, a person, a house or the visible world. Each entity actualizes and materializes – through its multiplicity and its multiple references to co-existing worlds and entities – social and cosmological relations that go beyond the actual relation. However, the multiple entities are materializing relations that are specific and not the same for every being or object and changing over time.

Finally by proposing an ontology based on partial encompassment resulting in a multiverse and multiple beings beyond the nature/culture divide a whole new set of questions arises. Is that a specific feature of Carib-speaking groups or are such principles widely dispersed among Lowland South American groups? To what extent does this ontology, with its references to animism and analogism, reflect ideas of hierarchy?[22] This ontology apparently goes beyond a non-hierarchical difference of perspectives and at the same time it rejects the totalizing hierarchical encompassment typical for pre-modern states. What is its relation to old chieftaincies and complex socio-political organisation in lowland South America?

---

22 Descola (2011) associates analogism with hierarchic encompassment in Mesoamerica and the Andes. The formerly so-called Circum-Caribbean culture area was associated with chiefdoms (Steward 1963). Today archaeological and ethnohistoric research is revealing a socio-political complexity for regions inhabited by Carib-speakers such as Guiana (Roosevelt 1987, Whitehead 1994, 1998) and the Upper Xingu (Heckenberger 2005). Nevertheless recent theories are associating notions of hierarchy in a revival of the Schmidt's (1917) work especially with Arawak-speaking groups (Hill & Santos-Granero 2002, see also Hornborg 2005).

Bibliographical references

Appadurai, Arjun
  1996   Diversity and disciplinarity as cultural artifacts. In: Nelson, Cary & Dilip Parameshwar Gaonkar (eds.): Disciplinarity and dissent in cultural studies. New York: Routledge, 23-36.

Barandiarán, Daniel de
  1979   *Introducción a la cosmovision de los indios ye'kuana-makiritare.* Caracas: Universidad Catolica Andres Bello, Instituto de Investigaciones Historicas, Centro de Lenguas Indigenas.

Barros, Edir Pina de
  1994   Os bakairi: economia e cosmologia. *Revista de Antropología* 37: 257-308.

Basso, Ellen
  1987a   *In favour of Deceit. A study of tricksters in an Amazonian society*. Tucson: The University of Amazonia Press.
  1987b   The implications of a progressive theory of dreaming. In: Tedlock, Barbara (ed.): *Dreaming. Anthropological and psychological interpretations*. Cambridge: Cambridge University, 86-104.

Bird-David, Nurit
  1999   'Animism' revisited. Personhood, environment, and relational epistemology. *Current Anthropology* 40 (Supplement): S67-S91.

Butt, Audrey
  1966/67   Akawaio charm stones. *Folk* 8/9: 69-81.

Butt Colson, Audrey
  1975   Birth customs of the Akawaio. In: Beattie, John & R. Godfrey Lienhardt (eds.): *Studies in Social Anthropology in memory of E. E. Evans-Pritchard by his former Oxford colleagues*. Oxford: Claredon Press, 285-309.
  1976   Binary opposition and the treatment of sickness among the Akawaio. In: Loudon, Joseph Buist (ed.): *Social anthropology and medicine*. London: Academic Press, 422-499.

Carrithers, Michael, Matei Candea, Karen Sykes, Martin Holbraad & Soumhya Venkatesan
  2010   Ontology is just another word for culture: Motion tabled at the 2008 meeting of the Group for Debates in Anthropological Theory, University of Manchester. *Critique of Anthropology* 30(2): 152-200.

Civrieux, Marc de
  1985   Medatia: A Makiritare shaman's tale. In: Guss, David M. (ed.): *The language of the birds: Tales, texts, and poems of interspecies communication*. San Francisco: North Point Press, 55-75.

Costa, Luiz & Carlos Fausto
  2010   The return of the animists: Recent studies of Amazonian ontologies. *Religion and Society: Advances in Research* 1(1): 89-109.

Descola, Philippe
  1992   Societies of nature and the nature of society. In: Kuper, Adam (ed.): *Conzeptualizing society*. London/New York: Routledge, 107-126.

1994   *In the society of nature. A native ecology in Amazonia*. Cambridge: Cambridge University Press.

[2005] 2011 *Jenseits von Natur und Kultur*. Berlin: Suhrkamp.

Dumont, Luis
1980   *Homo hierarchicus: The caste system and its implications*. Chicago: University of Chicago Press.

Fausto, Carlos
2008   Too many owners: mastery and ownership in Amazonia. *Mana* 4. (<http://socialsciences.scielo.org/scielo.php?pid=S0104-93132008000100001&script=sci_arttext&tlng=pt>; (02.10.2012)

Fock, Niels
1963   *Waiwai: religion and society of an Amazonian tribe*. Copenhagen: The National Museum.

Goulard, Jean Pierre & Dimitri Karadimas
2011   *Masques des hommes, visages des dieux. Regards d'Amazonie. Paris: CNRS Editions.*

Guss, David M.
1989   *To weave and sing. Art symbol, and narrative in the South American rain forest*. Berkeley/Los Angeles/London: University of California Press.

Guthrie, Stewart
1993   *Faces in the cloud: A new theory of religion*. Oxford: Oxford University Press.

Habermas, Jürgen
1988   *Theorie des kommunikativen Handelns*. Frankfurt am Main: Suhrkamp.

Halbmayer, Ernst
1999   Nahrung und Sexualität als Kommunikationsmedien des Identischen, des Sozialisierten und des Wilden bei den Yukpa Nordwest-Venezuelas. In: Mader,Elke & Maria Dabringer (eds.): *Von der realen Magie zum magischen Realismus*. Frankfurt/Wien: Brandes & Apsel/Südwind, 67-90.
2004   Elementary distinctions in world-making among the Yukpa. *Anthropos* 99: 39-55.
2010   *Kosmos und Kommunikation. Weltkonzeptionen in der südamerikanischen Sprachfamilie der Cariben*. 2 Vols. Wien: Facultas.

Heckenberger, Michael
2005   *The ecology of power: Culture, place, and personhood in the Southern Amazon, A.D. 1000-2000*. New York: Routledge.

Hill, Jonathan D. & Fernando Santos-Granero (eds.)
2002   *Comparative Arawakan histories. Rethinking language family and culture area in Amazonia*. Illinois: University of Illinois Press.

Hornborg, Alf
2005   Ethnogenesis, regional integration, and ecology in prehistoric Amazonia. Toward a system perspective. *Current Anthropology* 46(4): 589-620.

Kelly, José A.
2005   Fractality and the exchange of perspectives. In: Mosko, Mark S. & Frederick H. Damon (eds.): *On the order of chaos: Social anthropology and the science of chaos*. New York/Oxford: Berghahn Books, 108-135.

Latour, Bruno
1991   *Nous n'avons jamais été modernes. Essai d'anthropologie symétrique*. Paris: La
          Découverte.

Magaña, Edmundo
1982   Hombres salvajes y razas monstruosas de los indios kaliña de Surinam. *Journal of Latin
          American Lore* 8(1): 63-114.
1987   Astronomía shamanística tarëno. In: Magaña, Edmundo (ed.): *Contribuciones al
          estudio de la mitología y astronomía de los indios de las Guayanas*. Dordrecht: FORIS
          Publications, 167-213.
1990   Zarigueya Señor de los sueños. Una teoría tarëno. In: Perrin, Michel (ed.): *Antropología
          y experiencia del sueño*. Quito: Abya Yala, 117-143.

Menget, Patrick
1979   Temps de naître, temps d'être: la couvade. In: Izard, Michael & Pierre Smith (eds.): *La
          fonction symbolique*. Paris: Gallimard, 245-264.

Monod Becquelin, Aurore
1982   La metamorphose. *Journal de la Société des Américanistes* 68: 133-147.

Mosko, Mark S.
2005   Introduction: A (re)turn to chaos: Chaos theory, the sciences and social anthropological
          theory. In: Mosko, Mark S. & Frederick H. Damon (eds.): *On the order of chaos: Social
          anthropology and the science of chaos*. New York/Oxford: Berghahn Books, 1-46.

Rival, Laura
1996   Blowpipes and spears: The social significance of Huaorani technological choices.
          In: Descola, Philippe & Gísli Pálsson (eds.): *Nature and Society. Anthropological
          Perspectives*. London/New York: Routledge, 145-164.

Roosevelt, Anna C.
1987   Chiefdoms of the Amazon and Orinoco. In: Drennan, Robert D. & Carlos A. Uribe (eds.):
          Chiefdoms in the Americas. Lanham: University Press of America, 153-185.

Santos-Granero, Fernando
2009   *The occult life of things: Native Amazonian theories of materiality and personhood*.
          Tucson: University of Arizona Press.

Schmidt, Max
1917   *Die Aruaken. Ein Beitrag zum Problem der Kulturverbreitung*. Leipzig: Veit.

Steward, Julian H. (ed.)
1963   *Handbook of South American Indians: The circum-Caribbean tribes*. Washington, D.C.:
          United States Government Printing Office.

Strathern, Marilyn
1980   No nature, no culture: The Hagen case. In MacCormack, Carol P. & Marilyn Strathern
          (eds.): *Nature, culture and gender*. Cambridge: Cambridge University Press, 174-219.
1988   *The gender of the gift*. Berkeley/Los Angeles/London: University of California Press.
1992   *After nature: English kinship in the late twentieth century*. Cambridge/New York:
          Cambridge University Press.

Teixeira-Pinto, Marnio
  1997   *Ieipari. Sacrifício e vida social entre os índios Arara (Caribe)*. São Paulo: Editora Hucitec
             Anpocs.

Thomas, David J.
  1982   *Order without government. The society of the Pemon Indians of Venezuela*.Urbana/
             Chicago/London: University of Illinois Press.

Thornton, Robert J.
  1988   The rhetoric of ethnographic holism. *Cultural Anthropology* 3(3): 285-303.

Turner, Terence. S.
  2009   The crisis of late structuralism. Perspectivism and animism: Rethinking culture, nature,
             spirit, and bodiliness. *Tipití* 7(1): 3-40.

Uzendoski, Michael A.
  2010   Fractal subjectivities: An Amazonian-inspired critique globalization theory. In: Hutchins,
             Frank & Patrick C. Wilson (eds.): *Editing Eden: A reconsideration of identity, politics,
             and place in Amazonia*. Lincoln: University of Nebraska Press, 38-69.

Velthem, Lúcia H. v.
  2003   *O belo é a fera: a estética da produção e da predação entre os Wayana*. Lisboa: Assírio
             & Alvim

Vilaça, Aparecida
  2005   Chronically unstable bodies: Reflections on Amazonian corporalities. *Journal of the
             Royal Anthropological Institute* 11: 445-464.
  2011   Dividuality in Amazonia: God, the Devil, and the constitution of personhood in Wari'
             Christianity. *Journal of the Royal Anthropological Institute:* 17(2): 243-262.

Viveiros de Castro, Eduardo B.
  1997   Die kosmologischen Pronomina und der indianische Perspektivismus. *Bulletin de la
             Societé Suisse des Américanistes* 61: 99-114.
  1998   Cosmological deixis and Amerindian perspectivism. *Journal of the Royal Anthropological
             Institute* 4(3): 469-488.
  2001   GUT feelings about Amazonia: Potential affinity and the construction of sociality. In:
             Rival Laura M. & Neil L. Whitehead (eds.): *Beyond the visible and the material.* Oxford/
             New York: Oxford University Press, 19-44.
  2004   Exchanging perspectives. The transformation of objects into subjects in Amerindian
             ontologies. *Common Knowledge* 10(3): 463-484.
  2010   Intensive filiation and demonic alliance. In: Jensen, Casper B. & Kjetil Rödje (eds.):
             Deleuzian intersections: Science, technology, anthropology. New York/Oxford: Berghahn
             Books, 219-250.

Wagner, Roy
  2001   *An anthropology of the subject: Holographic worldview in New Guinea and its meaning
             and significance for the world of anthropology*. Berkeley: University of California Press.
  2005   Afterword: Order is what happens when chaos loses its temper. In: Mosko, Mark S. &
             Frederick H. Damon (eds.): *On the order of chaos: Social anthropology and the science
             of chaos*. New York/Oxford: Berghahn Books, 206-248.

Willerslev, Rane
   2007   *Soul hunters. Hunting, animism, and personhood among the Siberian Yukaghirs*. Berkeley: University of California Press.

Whitehead, Neil L.
   1994   The ancient Amerindian polities of the Amazon, the Orinoco, and the Atlantic coast. In: Roosevelt, Anna C. (ed.): *Amazonian Indians from prehistory to the present*. Tucson: University of Arizona Press, 33-53.
   1998   Colonial chieftains of the lower Orinoco and Guayana coast. In: Redmond, Elsa M. (ed.) *Chiefdoms and chieftaincy in the Americas*. Gainesville: University of Florida Press, 150-163.

Zeitlyn, David
   2009   Understanding anthropological understanding. *Anthropological Theory* 9(2): 209-231.