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**The materiality of life:
Revisiting the anthropology of nature in Amazonia**

Abstract: In what distinctive ways are lowland South American Indians animists? Is there a place in Amerindian thought for a conception of biological life autonomous from social intelligence and its socially determined intentions? How far can it be said that by viewing animals, plants and objects as subjective agents endowed with consciousness and intentionality, native Amazonians construct a way of knowing the world which is both culturally unique and antithetical to biology? In trying to provide ethnographically informed answers to these questions, I critically review various theoretical approaches to animism, ontological animism and perspectivism. In ending, I attempt to explain why these theories ultimately discard or ignore the rich base of biological knowledge that underlies the natural and cosmogonic classifications of native Amazonians.

Keywords: Animism, ontologies, perspectivism, Huaorani, Ecuador, Amazonia, 20th-21st centuries.

Resumen: ¿De qué maneras distintivas son animistas los indígenas de las tierras bajas de América del Sur? ¿Existe un lugar en el pensamiento amerindio para una concepción de la vida biológica autónoma de la inteligencia social y sus intenciones socialmente determinadas? ¿Hasta qué punto se puede decir que al ver los animales, las plantas y los objetos los indígenas amazónicos como agentes subjetivos dotados de conciencia e intencionalidad construyen una manera de conocer el mundo que es tanto culturalmente única como antitética a la biología? Al tratar de dar respuestas etnográficamente informadas a estas preguntas, hago una revisión crítica de las diferentes aproximaciones teóricas al animismo, el animismo ontológico y el perspectivismo. Para concluir, intento explicar por qué estas teorías acaban en última instancia por descartar o ignorar la rica base de conocimiento biológico que sustentan las clasificaciones naturales y cosmogónicas de los indígenas amazónicos.

Palabras clave: Animismo, ontologías, perspectivismo, huaorani, Ecuador, Amazonía, siglos xx-xxi.

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Animism, whatever this term means after almost twenty years of renewed debate,¹ offers an excellent standpoint from which to measure or evaluate how far we have moved towards theorizing nature as locally produced in Amazonian settings. With the benefit of temporal depth, we are now in a better position to appreciate how the academic understanding of animism has evolved over time, and, with it, the use of a number of other key concepts, such as agency, humanity, and intentionality (Rival 2012). Deconstructing animism has led to a multiplicity of new terms to cover every concept involved, as well as slippery synonymy between them. “Agent”, for instance, has multiplied into “agency”, “actant”, “agentivity”, “reactive agent”, and so forth. For “humanity”, we now have terms such as “other-than-human”, “non-human”, as well as “person” and “personhood”, terms which have renewed our understanding of anthropocentrism and anthropomorphism. “Consciousness”, a word rarely used today, has become synonymous with “mind”, “mindful”, “subjectivity”, “interiority”, “soul”, and “intentionality”. Rethinking animism has produced in less than one generation new analyses of ethnographic materials that have converged towards a peculiar form of theoretical consensus regarding the discursive production of nature as “after nature”. Thinking in terms of “after nature” or of “post-humanism” has often led to a more or less happy marriage between the metaphysics of being and the primacy of direct experience, as well as to the avoidance of scientific and objective attempts to understand the world on the ground that such “naturalist” analyses necessarily distort or subvert indigenous ways of knowing (Bird David 1999; Descola 2005). Viveiros de Castro (2004: 468) puts it bluntly: whereas for Amerindian shamans to know is to personify, moderns need to objectify – or desubjectify – in order to know. Animist worlds, where there are no “things”, for “something” is always also “someone”, cannot be understood with analytical tools designed to differentiate “knowledge” from “belief”. Viveiros de Castro goes further: “A thing or a state of affairs that is not amenable to subjectification [...] is shamanistically uninteresting” (Viveiros de Castro 2004: 469-470). Would it be that apart from their metaphysics, and the potential virtualities with which they enrich our repertoire of non-representational ontologies, Amerindian socio-cultural systems have nothing to contribute to anthropological knowledge? What has happened to the Buberian contrast between I-thou and I-it that initially informed perspectivism? Has it led to a new form of dualism that radically differentiates the ontology of the jaguar-shaman-warrior-

1 See Harvey (forthcoming), which builds on his 2003 book to offer a general survey of animism in contemporary thought. See also Viveiros de Castro (2009) for a philosophical debate based on an examination of Amazonian metaphysics. Amazonianist anthropologists have yet to reflect fully upon the growing place occupied by perspectivist animism in general anthropological theory and cultural theory (Turner 2009; Costa & Fausto 2010).

hunter from all other ways of knowing and being? To what extent do we need to territorialize modes of knowing? On what basis should we define the incommensurability of worldviews, or the continued production of radical difference?

Perspectivism (Viveiros de Castro 1998) has greatly facilitated the “ontological turn” in anthropology, or, in other words, the systematic attempt to clear anthropological theory from all traces of ethnocentrism. By deriving modes of knowing from modes of being, “ontologists” have systematically questioned the implicit separation of magic and belief as mere “cultural froth” from what is often considered to be tangible, real, rational, or proto-scientific knowledge about the world (Carrithers et al. 2010). Ontologists have sought to redeem anthropology from its colonial past through the active transformation of anthropological concepts, especially “belief”, which, in their analysis, reduces alterity to irrationality. Their *cheval de bataille* has been nature/culture dualism, or what they see as the artificial separation of “material” from “immaterial”. By defining ontology as an alternative to culture, they hope to bring forth as many natures as there are cultures; and by celebrating the richness of “multiverse” over the poverty of “universe”, they ask anthropologists to foster the “conceptual self-determination” of the people they study. The language of ontology replaced the language of culture in anthropology sometime in the early 2000s as a response to a shift that had already occurred in Western philosophy in reaction to “the crisis of representation”. As Mario Blaser told me recently: “You need ontology as a concept to be anti-dualist. There exist other forms of knowledge. The key issue is how do we know what the world is made of? We need a new metaphysics”.²

To fully appreciate the impact of the “ontological turn” in Amazonianist anthropology, we need to take into account, I wish to argue, that the Amazon region came out of age ethnographically at a time when definitions of culture in terms of symbolic meaning and semiotics were giving way to practice, agency, embodiment and performance. In societies where cosmological forces, invisible qualities, and immaterial properties loom large, the “ontological turn” was preceded by the “material turn”, which offered plenty opportunities to look at the human body and its ornaments, ritual and domestic objects, musical instruments, transportation devices and weapons – and material culture in general, as an endless source of information on the constitution of personhood and difference. Whether they engaged with the material world of the whites or with the physical presence of plants, animals, topography or other natural elements, native Amazonians were understood to equally constitute, communicate and reproduce their own relational orders and specific modes of knowing. With the “ontological turn”, whether under the guise of “perspectivism” or

2 Personal communication, September 2011. See also Blaser (2010).

“animism”, a new generation of ethnographers revisited the centrality of corporeality in Amazonia, not so much in terms of embodied relatedness and its sociological significance, but, rather, in terms of native metaphysical concerns with the uncertain and transitory nature of the human person, understood to be caught in a continuous process of “Other-becoming”. As a result, there has been an uneasy move back and forth between a focus on indigenous practices and a focus on native concepts, with much conceptual confusion around the word “relation” and its derivatives (“relatedness”, “relational”, and so forth). Costa & Fausto (2010), for instance, see no obvious difference in the ways in which Viveiros de Castro, Strathern, Latour and Ingold conceptualise the flux of social life or theorise embodied practices. As far as they are concerned, all these authors are equally engaged in questioning the great modernist divide between nature and culture, and in debunking the reified anthropological concept of society. They are all helping anthropology to become more phenomenological by moving closer to “relational becoming” and further away from “represented substance”. However, undoing the nature/culture dualism requires far more than “ontologising” structures and practices or “phenomenologising” perspectivism, as I illustrate below with a short discussion of Ingold’s approach to animism.

1. Tim Ingold, animism and the meaning of life

I have recently discussed Ingold’s (2006) approach to the relationship between animism and the meaning of life (Rival 2012), as well as his proposition that animism is a relational ontology founded on the human propensity to communicate, including across species boundaries, which brings him to reflect on the properties of animation in relation to the process of life. In this essay, Ingold contrasts the dualist thinking of scientists and of modern people in general with the monist approach of indigenous peoples whose animic ontology he sees as one version of the ontology of dwelling. His interest in animism starts with a Piagetian question: Why do we see lifeless things and events as alive? For Ingold, the only valid way of dissolving the culture/nature dualism is to write ethnographies that restore the original truth and primacy of direct experience. In the phenomenological approach he defends, the subject knows the world through immersion. Life and social relations, like understanding, are emergent properties of interactions between organisms. Given that life is the emergent property of a relational system in which everything is in perpetual flux and movement, it would be wrong to differentiate, as western scientists do, between organic and non-organic life:

The sun is alive because of the way it moves through the firmament, but so too are the trees because of the particular ways their boughs sway or their leaves flutter in the wind, and because of the sounds they make in doing so (Ingold 2006: 27).

Animation may be imagined as a sign of intentionality, but it first and foremost exists as a property of the world perceived through engaged action (Ingold 1992). If animation is a matter of direct perception, Ingold's contrast between his generic animist-cum-dwelling construct and other approaches becomes clearer. To the cognitive psychologist, Ingold simply says that animism has nothing to do with an innate, unconscious and evolutionary predisposition to act as if inanimate objects were actually alive. He reminds the plant scientist, bent on attributing life to the tree "because it is a cellular organism whose growth is fuelled by photosynthetic reactions and regulated by DNA in the cell nucleus", that the tree is perceived to be alive because its branches move in the wind. He repeats to the cultural anthropologist that the relational person does not behave "according to the directions of cultural models or cognitive schemata installed inside his or her head", for action and perception unfold "within a nexus of intertwined relationships". To the post-humanist sociologist and the material culture theorist he interestingly remarks that their abstract world is "unbreathable" (Ingold 2007: 11). In this remark, he remains close to his earlier vocation as an ecological anthropologist bent to look at biology from an anthropological standpoint, and at anthropology from a biological one.

Ingold's approach to the properties of animation in relation to life is therefore entirely different from that proposed by scholars in the field of Science and Technology Studies, despite superficial similarities. At first glance, Ingold seems to share a great deal with the conceptual project attempted by Bennett (2010) in *Vibrant matter*, for instance. To both authors, western dualism must give way to a heterogeneous monism. As the distinction between object and subject gets blurred, "nature" dissipates in an encompassing "environment" composed of humans, non-human persons, material objects and the dynamic relations between all these constitutive elements. The objective and subjective lives of people, species, and things form the total dance in which relational subjects "become with". Being human involves the process of becoming with non-humans, and "becoming with" the exploration of the unfolding relatedness of humans with non-humans. It is indeed difficult to distinguish Ingold's "meshwork" from Bennett's "assemblages". The key to the subtle difference between the two concepts may be found in Bennett's (2010: 53) claim that we must "reconfigure life away from its mooring in the physiological and the organic". Whereas Ingold calls us to be much more aware of the world around us, in all its historicity and relationality, Bennett declares that there is no nature left at all, everything around us has already become "second nature" (Bennett 2010: 115), by which she means that "the very extension of science, technologies and markets has become almost coextensive with material existence" (Latour 2008). It is too late for

moderns to relearn how to grow, live and reproduce with plants and animals; they need to emancipate themselves from biology. As long as they *love* the technology they create, moderns can harmlessly continue to invent and innovate (Bennett 2010: 61; see also Latour 2009). There is thus a sharp difference between Bennett's "vital materialism" and Ingold's "meshwork of interwoven lines of growth and movement", which has to do with the reality of the world they envisage, as the following quote makes clear:

Is it primitivist to acknowledge that we inhabit a world of earth, sky, wind and weather, in which the sun shines, rain falls, trees grow and water can turn into ice? Life as we know it depends on all these things. Throughout our lives we breathe the air, more or less as we find it. I am not worried that it would be somehow inauthentic if we ceased to do so. I am worried that we would all be dead (Ingold 2007: 33).

If Ingold's world is ecologically human, Bennett's is not. In her "onto-tale", "everything is, in a sense, alive". This indicates that she has redefined life as a generative process of creativity emancipated from both God and biology, which she describes as "the uncaused causality that ceaselessly generates new forms" (Bennett 2010: 117). In other words, post-human thinkers need to erase the biological meaning of life to finally achieve the dissolution of the ontological difference between living organisms and things. Ingold, however, is at pains to explain how an ecological awareness of the world can be maintained without *habitus*, collective values, institutionalized norms, and explicit rules. If the ontology of dwelling comes close to Rousseau's naturalism, it fails to address the importance of social reproduction, without which natural society, as Rousseau was painfully aware, could not be passed on from one generation to the next.

This brief encounter with perspectivism, direct perception and post-modern vitalism highlights the fact that attributing life to the lifeless takes animism into a sphere of conceptual complexity far more challenging than the mere attribution of personhood or humanity to "other-than-humans" does. On the basis of my ethnographic work, I wish to illustrate now that there is more to lowland South American cultures than the animist and perspectival ontologies have so far revealed. I will then conclude with a discussion of what can be gained by analysing Amazonian societies without assuming from the outset that animist peoples do not reason in terms of ecological properties, or that folkbiology is culturally irrelevant in shamanistic societies.

2. Huaorani forest society

My ethnographic work with the Huaorani illustrates the ways in which this distinct culture reasons about ecological relations and sustains diverse and dynamic landscapes in the Ecuadorian Amazon. I summarize below some of the generalizations I have drawn over the years regarding the Huaorani system of “natural abundance”, which is predicated on “putting the prey at the centre”.³

For the Huaorani, the forest is a vital space they call *monito òmè*, “our land”. Men, women and children spend a great deal of time slowly exploring the ever evolving network of paths that becomes their homeland for as long as they walk this part of the forest (*òmere gomoni*), observing with obvious pleasure and equal interest animal movements, the progress of fruit maturation, and vegetation growth. Such routine explorations are guided by numerous ecological distinctions, and forest patches are named according to the age of trees and species composition. The natural and the social worlds are ordered according to processes of maturation and growth, which are not only considered to be key biological phenomena recorded calendrically, but also valued for their aesthetic qualities. However, there are no words in *huao terero* (literally, “the true humans’ spoken language”) to say “nature”, “ecology”, “religion”, “animals” or “plants”. Abstract, reified categories that separate the body from the mind, belief from perception, or human society from the non-human environment are absent from *huao terero* as they are from most indigenous languages.

My ethnography of this unique Amazonian people could have been written using the Ingoldian language of direct perception. Much of Huaorani trekking may be understood as “lines of growth” that get “comprehensively entangled” to form “meshworks” “like the vines and creepers of a dense patch of tropical forest” (Ingold 2012). However, such analytical language, with its narrow focus on the individual experiencing her being entangled along a path of becoming, would not have allowed me to engage fully with the wealth of ecological information exchanged by trekkers as they walk, while also keeping paths open through many small and careful gestures, such as picking up thorny leaves fallen during the night, breaking bending branches, or slashing invasive grasses. Nor would have such a language made it possible for me to convey the fact that trekking through the forest is like walking through a living book in which natural history and human history merge seamlessly.

3 This section refers to the following published ethnographic works: On Huaorani conception of the forest, Rival 1998b and 2007a, b, and c; On their aesthetics of growth, Rival 1998a; On their creation myths, Rival 1997, 2005; On their hunting weapons Rival 1996; On palm groves, Clement, Rival & Cole 2009.

Not only do walkers converse endlessly about the traces left by animals or about the material signs that evoke times long gone (especially deaths and spearing raids), but they also communicate different messages about the world according to context and circumstance. For instance, the same tree may be admired and poetically commented upon for its brand new and shiny leaves one day, only to be feared the next day, when a tempestuous wind animates it with a different, and much more dangerous, kind of energy. However, to analyze the latter as a clear instance of ontological animism that can – and should – be isolated from the rest of the ethnography of trekking, as if the tree was culturally more significant when perceived as dangerous, would be mistaken. Knowing the forest through trekking involves various ways of knowing at once, whether these are based on direct, individual perception and experiential learning; derived from conversations about the objective properties of the world; or related to conversations elaborating people's cultural heritage and history.

For similar reasons, I could not bring myself to reduce Huaorani chants and myths to the language of perspectivism. Myths, like ethnographic contexts, are far more complex and idiosyncratic than perspectivism allows for. In my analysis of the *axis mundi* creation myth, I discuss the fact that the giant ceibo tree (*Ceiba pentrandia*), container of all life forms, expresses the fundamental characteristics of the Amazon ecosystem, which largely depend on a delicate balance between heat and humidity, and shade and light. According to this myth, all that was alive dwelled in the giant tree. In those times of beginning, living beings, neither animals nor humans, formed one single group. However, there were also birds (doves), the only game available to hunters, and two dangerous individuals, Eagle (raw meat eater) and Condor (eater of rotten flesh), who preyed on people and doves alike. The differentiation between prey and predator thus predated the differentiation between humans and animal species. And it was the attempt by several primordial beings (in particular Squirrel and Spider) to trick and kill the predators that caused the fall of the giant tree and the beginning of the world as it is known today. Although correlating the mythical and the social is far from a straightforward exercise, I have explained why there are grounds for arguing that the Huaorani myth of origin expresses the fundamental characteristics of the Amazon ecosystem. There would be no life on earth without trees, as they provide shade, food and shelter, and prompt rain formation. The primordial tree is a small ecosystem in itself, and the world expands when this perfectly self-contained microcosm collapses, giving birth to a new ecosystem, which is as integrated and self-generative as the primordial tree. If at the beginning of creation there was only one single giant tree rooted in earth and tied to the sky, its transformation into a great water system and a vast forest landscape through the dynamic inter-play of social agency has caused the world to expand and exist with all its differentiation and

biocultural diversity. The myth of origin thus articulates a powerful message, one that associates social categories with two distinct natural processes, the aggressive relation between predator and prey on the one hand, and the life-sustaining relation between people and forest plants on the other.

Rereading versions of this myth today, I also see how it articulates the ritual power inherent in natural fertility and regeneration (see also Hill 2009). Unlike the Wakuenai who invoke nature to create culture as not only an autonomous and abstract world but also, one may add, an entirely fabricated world, the Huaorani celebrate in their myths and poetry the inherent power that biological organisms have to grow themselves and be alive, which is especially visible in new leaves that shine. Today, they say that brightly coloured brand-new clothes shine as young leaves. The power of self-regeneration does not derive from human intentionality, and the vitality and will to live such a power signals is not necessarily attributed to a spiritual force; in any case, the cosmic force that causes plants and animal and human bodies to grow and live is neither singularised nor anthropomorphised. Another creation myth involving the creative power of Grandfather and Grandmother (his wife) shares even more similarities with the perspectivist cosmological deixis, for it seems to suggest that animals were ex-humans. Yet, the myth's rendering of the act of creative transformation, which requires that Grandfather, having been murdered by his grandchildren, be reborn by his wife, plays on the theme of self-regeneration, while giving it a clear sociological content: gender differences are not only prior to but also indispensable for speciation to take place. Therefore, I am reluctant to argue that the Huaorani see a metaphysical continuity between present-day humans and animal species. Rather than a dualist contrast between two mythologies, one that sees animals as ex-humans, the other that takes humans to be ex-animals (Viveiros de Castro 2004: 465), we have, it seems to me, two systems that attempt to grasp expansion, change and diversification. For the Huaorani, the initial beings from which both contemporary humans and animal species derive were not human; only contemporary Huaorani are humans.

Another myth about the origin of blowpipes and the function of spears further develops the fundamental importance of gender and kinship, this time by showing the double nature of malehood. I have shown in my published work on these issues that Huaorani hunting cannot be satisfactorily analyzed through a direct perception, a perspectivist, or an ontological lens alone. Hunting with a blowpipe and with a spear are two entirely different ways of socializing the environment and domesticating nature. More importantly for the argument developed here, these two forms of hunting embody two different ways of engaging and knowing the forest's ecology, and of using the signs that are internal to biological dynamics (Kohn 2007; Rival

2012). It is for this reason that analysing hunting weapons as mere extensions of the human body or within the partial relational field created by the “mutual constitution of things and persons” (Santos Granero 2009) seems to me entirely inadequate. By isolating humans and their artefacts from the ecological and symbiotic spaces in which species meet, contributors to *The occult life of things* perpetuate human exceptionalism (Schaeffer 2007). Moreover, they are left with little else than discussing comparatively mastery and control, that is, the capacity to extract a voluntary action from others (Fausto 2012). As “reactive agents”, objects are necessarily reduced to a very low degree of agentivity (Santos-Granero 2009: 20). Culture built out of and against nature can thus triumph again, as the biology of individuals, nuclear families and the whole forest ecosystem gets subsumed and hierarchically encompassed by “society” in the act of social reproduction (Turner 2009). It is as if both post-structuralism and neo-Marxism are faced with the same theoretical void in their attempts to overcome the structuralist asymmetrical dichotomy between nature and culture. This is why I continue to view the Huaorani blowpipe as a regulatory instrument inserted in webs of systemic relations through which the reproduction of society and forest is ensured, even if my early analyses would now require some adjustment in the light of the theoretical and ethnological developments that have occurred in the last twelve years.

There are plenty examples in Huaorani myths, shamanic practices, chants and other cultural expressions to illustrate the importance of predation, which, as the myth of origin discussed above indicates, has always constituted one dimension of the world. However, the call of predation is resisted, and limits are placed on the potential for reversibility between human prey and powerful cannibal attackers. Perceiving themselves as the victims of enemies or evil spirits in the shape of mystical jaguars or harpy eagles who reproduce themselves by continuously snatching their creativity, vitality and life-force, the Huaorani live their lives eluding the contagion of contact with those who do not, like them, put the prey at the centre. Moreover, if shamans have the power of making game animals stay close to humans, hence facilitating hunting, it would be wrong to understand shamanic power as more cultural than the forest management practices through which people transform the forest into a giving environment. Furthermore, by paying due attention to the range of more or less intentional management practices through which the organic growth of useful forest plants is encouraged and the forest anthropomorphised, it becomes possible to discern in these practices a wealth of ecological knowledge that forms an intrinsic part of Huaorani culture and of their ecological view of the cosmos. Huaorani ecology should be understood as ecology, as well as symbolic, historical and political ecology.

The fundamental problem with Descola's ontological animism and Viveiros de Castro's perspectivism, as a Huaorani would see it, is that they present the world as a giant cosmic food web (Arhem 1996), that is, as it is imagined *by their enemies*. The Huaorani vision of life is not limited fertility, but natural abundance. It is in the nature of trees and other plants of the forest to give continuously to humans without asking anything in return. Far from being a pristine environment external to society, the forest exists as the product of the productive and consumptive activities of past living beings and people. In other words, the forest's natural bounty is understood to result from the interlocking of animal, plant and human life cycles. It is by "doing" (*què*) and "living" (*huè*) in such and such part of the forest that people "make the forest grow" (*ahuene tei tei què*), exactly as people who lived in the past did, and as people in the future will almost certainly do as well. People are vaguely aware that today's activities are making similar activities possible in the future, but such awareness has little to do with planning for the benefit of future generations. Furthermore, the future is never conceptualized in terms of expansion – i.e. more growth. The idea that future generations could be wealthier, taller or more numerous than present-day people is totally alien to the Huaorani, for whom trees offer natural models of life-cycle growth and developmental transformation. A child who learns how to walk, a youth who gets married, a man who kills, a dreamer who lets the jaguar in, an old woman who lets herself die, or a house-group that splits are all irreversibly changed in the process. Of such transformations, only those that are associated with developmental processes are talked about in terms of plant growth, for they ensure that, overtime, both the forest and society will be regenerated through the business of ordinary life without need for accumulation, surplus, stealing, or the unequal transfer of life energy from one sphere to another. By living in close association with forest groves, where they grow, reproduce and die along with fruit bearing trees, birds, monkeys and other species, people can thus forge long-term intergenerational relationships beyond genealogical amnesia (Chaumeil 2007). Contrary to Ingold's (1996: 22) interpretation, the Huaorani do not transform the forest in a huge garden, for establishing the right ecological conditions for growth requires that humans territorialize their activities over time in a way that respects the continuity of autonomous reproduction of social others, both human and non-human.

In stressing the counter-discursive quality of Huaorani representations of growth, my early work may have given too much importance to people, whether past or present, enemy or kin, hunter-gatherers or horticulturists. I needed to show that by anchoring their society within the forest ecosystem and its cycles of growth, decay and regeneration, the Huaorani had found ways of countering the timeless transformational whirlpool that engulfed their predatory enemies. In the value system

I was trying to interpret, the “true humans” or “real people” (literal translation of *Huaorani*) consciously assume the subjective identity of “prey at the centre” in their continuous battle against those who take rather than give. Today, I would pay more attention to the interweaving of moral and ecological reasoning that underlie the Huaorani’s eco-cosmos, in particular when it comes to understand relations between plant and animal species. As Scott Atran reminds us, the science of ecology is rooted in popular science, or common sense (Atran 1988), and it is at that level that we need to understand cultural particularisms (Atran 1999). This is why the approach I have attempted in more recent publications has fully endorsed a more integrated and holistic anthropology such as that advocated by Roy Ellen, who proposes that we seek “to answer the large questions about human distinctiveness and diversity” without shying away from engaging biology positively and critically, or forgetting that culture must be taken seriously (Ellen 2010: 393). And this is where perhaps my work goes against the grain of the styles of analysis discussed here, for despite real differences in their theoretical approaches, Ingold, Descola and Viveiros de Castro equally agree that whatever animism is, it is antithetical to modern scientific knowledge. Such a rejection of biology disregards the fact that it is over-simplistic to treat science as an objectivist knowledge system predicated on a binary opposition between nature and culture (Richards 1993).

3. To conclude

While accepting that discontinuities between humans and non-humans do not just organise the way people living in different cultures think about life and represent it but also the way in which they experience the world, I have stressed in this paper the need to acknowledge that the discontinuities recognized by the Huaorani and other native Amazonians may not be as radically different from our own as they are some time portrayed to be. This is an important fact to consider in an era when the contradictions between economic development and the preservation of biological and cultural diversity have become so acute that they not only represent the greatest political challenge of our times, but also call for a cultural revolution in the way we think about nature.

As capitalism reinvents itself and its relation to nature, new speculations about vital processes, animated matter, and the living power of the earth are surfacing (Bennett 2010). Such interrogations have led to the fragmentation and the weakening of “naturalism”. Monist attempts to blur the distinction between objects and subjects have dissolved “nature” into an all-encompassing “environment” composed of barely differentiated humans, non-human persons, material objects, and the dynamic

relations between all such constitutive elements. Resulting currents of thought, such as, for instance, “post-humanism”, seem undecided as to whether “the very extension of science, technologies and markets has become almost coextensive with material existence” (Latour 2008, 2009), or whether the twenty-first century will see the constitution of a new covenant to sustain the “human-earth-system” (Chapin et al. 2009). In the context of such uncertainty, studies of how marginalized communities around the world envisage life in the land and understand life processes acquire new significance. As the instant success of *La chute du ciel. Paroles d'un chaman yanomami* (Kopenawa & Albert 2010) illustrates, indigenous ontologies of becoming are acquiring an unprecedented political credence. The need to interrogate the longing for “the ecology of others” (Descola 2011) and to rethink anthropologically the attribution of life, animacy, agency, and relationality has thus never been greater.

We therefore need to build upon recent anthropological discussions of animism, personhood and the meaning of life to interrogate the attribution of life and death in a wide range of social and cultural contexts. Animism is the capacity to appraise plants, spirits, objects and animals as other-than-human persons, that is, as volitional, sentient, sensitive, aware, and intelligent beings. Much recent ethnography of lowland South America illustrates the creativity and agency of the other-than-human world, as well as the rich communication that takes place between human and other-than-human social persons. However, the limits of extending personhood as a category of human-like subjectivity to non-humans has also been amply demonstrated (Santos Granero 2009; Brightman, Grotti & Ulturgasheva 2012). Recent scholarship gives us a good understanding of which objects, animals or plants acquire human-like qualities, and when; what the relationships between humans and non-humans consist of; or what humanity or subjectivity actually mean as trans-species qualities. However, we know very little about what life qualities humans share with non-humans, or what images, metaphors, techniques or experiences are mobilized to express culturally what organic life is about. There seems to be enough evidence to suggest that life is often apprehended as a relational process; but what about conceptions of death as a process that regenerates life? Are the indigenous concepts of life and death related to those of animation and non-animation? Which practical actions best describe the workings of vital processes? Can things be alive? Is loss part of life? Is matter lifeless? Is the earth thought about as a living organism? Can there be life or death without transformation? How does biological life relate to human life? Is life a limited good unequally distributed among beings? Do indigenous cultures contrast wild and anthropomorphic landscapes? Is human wellbeing in any way connected to nature's ecological functions?

In asking and answering such questions, it is extremely important that we bring forth ethnographies that do pay equal attention to the level of individual experience and consciousness; the cultural norms and values that give rise to distinct communities; and the invariants of the human condition as they are expressed in the way people in all cultures question human existence, and communicate about across cultural boundaries about it. Only then can we hope for a future when the reassuring boundaries between nature and culture will have blurred for good, opening, one can only hope, an era when an emerging cosmopolitan human reason will have brought forth new ecological values and shared normative practices.

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