

JAN DAVID HAUCK AND FRANCESCA MEZZENZANA

Growing Up in the Face of Change

Environmental Transformation and Child Socialisation in Indigenous South America

Abstract: The relationship of humans with the nonhuman world has become a central topic in anthropology in recent years. This has also led to a renewed interest in Indigenous communities, as those most vulnerable to environmental change, while also offering alternative modes of relating to the environment. But very little attention has been paid to children in such debates. Children will suffer the long-term consequences of changes. In turn, modes of relating to the environment and its human and nonhuman inhabitants are socialised during childhood. This special issue explores child socialisation in the face of environmental changes. Through ethnographic case studies from Guyana to southern Chile, our contributors discuss modes of learning across environments, the impact of moving to novel spaces, how children learn to navigate them, and the relationships they build. Our introduction gives a conceptual overview of our approach to child socialisation, the environment and change and transformation.

Keywords: childhood, cultural change, environment, human–nonhuman relations, Indigenous people, Lowland South America, socialisation

As communities across the globe grapple with the dramatic effects of anthropogenic transformations of the environment, our relationship with the nonhuman world has come to the forefront of academic and public debates. Indigenous communities figure prominently in these on two grounds. They are the ones most affected by deforestation, raging wildfires, floods, developmental projects, the invasion of their territories for resource extraction, and local effects of climate change, results of ongoing relations of coloniality and global inequality (Whyte 2018). At the same time, Indigenous ways of conceiving of and relating to the nonhuman world have attracted increasing attention in the quest for less destructive alternatives to late capitalist exploitation and its philosophical foundations in the Euro-American intellectual tradition, its constructions of ‘nature’ and human exceptionalism (Descola and Pálsson 1996; Ingold 2000). Many progressive environmental and Indigenous movements cast their political struggles explicitly in cosmological terms, asking for the recognition of nonhumans such as mountains, rivers or forests as subjects with legal rights (de la Cadena 2015; Kothari et al 2019).

Within these debates, however, very little attention has been paid to children. This absence is striking primarily for two reasons. First, children will suffer the long-term consequences of environmental changes. Whether forced to move to new environ-



ments or confronted with ecological transformations, Indigenous children inevitably experience the spaces in which they grow up in ways that are dramatically different from their parents and grandparents. But, with a few notable exceptions (e.g., Cohn 2006; Morelli 2017; Virtanen 2012; Walker 2013), not much has been written about how children learn to live in environments different from those of previous generations – even though they are often the ones who adapt to such changes the quickest, learning new modes of subsistence, developing skills to navigate changing environments and creating their own paths for the future. Thus, a discussion of the impacts of environmental transformations on local communities remains incomplete without paying attention to the younger generations (Allerton 2016; Lancy 2008).

Second, it is during childhood that our understandings of and modes of relating to the environment develop. In the process of becoming culturally competent members of our communities, we learn not only to navigate the physical spaces in which we grow up but also how to understand, approach and interact with other human and nonhuman inhabitants. Yet again, save a few exceptions (e.g., Bird-David 2008; Toren 2012), children and children's learning have rarely been paid attention to in the vast anthropological literature on human–nonhuman relations and Indigenous cosmologies. We know little about how a child comes to learn about the existence of a dangerous forest spirit; how a relationship of care for a pet is developed; or how a child's experience of a mountain or a river comes to be shaped by narratives that their forebears have been telling for generations. Ways of conceiving of and interacting with the environment emerge through repeated acts of learning as children move through specific places (Ingold 2000). As Christina Toren (1999: 28) has cogently put it, anthropology must include children if we want 'to understand how we come to hold the ideas that we hold'. At the same time, looking at children's socialisation provides insights into how we do *not* come to hold ideas that previous generations held – how and why certain cultural practices and beliefs are transformed or abandoned.

This special issue brings Indigenous children to the fore in anthropological debates on human–nonhuman relations, and environmental and cultural change. Through five ethnographic case studies from communities across Indigenous South America, the articles explore the understandings of environments that children develop, the relationships they build with other human and nonhuman inhabitants, how environmental changes impact children's development and well-being, as well as how children adapt to and appropriate new environments. Among the questions our contributors address are: What relationships do children build with nonhumans and how? For instance, through what everyday practices do Pehuenche children learn how to approach trees with respect in southern Chile (Piña, this issue)? What relationships with spiritual beings do adolescent Wapishana girls in southern Guyana develop after entering a boarding school (Stafford-Walter, this issue)? Our contributors also explore the affordances of different environments for children's socialisation. For instance, how do the enclosed spaces of schools on an island off the Chilean coast constrain children's possibilities for learning, compared to the open spaces of potato fields and beaches (Bacchiddu, this issue)? How do Pehuenche children experience the mountainous terrain where their families spend many months every summer, compared to the winter villages in the lowlands (Piña, this issue)? How do Galibi-Marworno children in North-

ern Brazil learn to navigate the gardens, forests, cassava mills, rivers and cities in which their families' economic activities take place? And how do the respective human and nonhuman 'owners' of these different spaces foster or constrain children's freedom to move and learn (Tassinari, this issue)? Finally, this collection of articles explores the ways in which children adapt to and appropriate but also suffer from changes to new environments that were forced on them. For example, for Wapishana girls, the dislocation from their home communities to a boarding school and the disruption of relationships built in the former brought about a spiritual crisis (Stafford-Walter, this issue). By contrast, Xikrin children in Central Brazil quickly learned how to navigate and subsist from a river to which their communities were forced to relocate. How does children's engagement with the river impact cultural and socio-economic changes and innovations (Cohn, this issue)?

We explore these questions from a regional perspective, focusing on Indigenous South America. This choice is not incidental. The region is undergoing rapid socio-economic and environmental changes. Home to the Amazon rainforest, no week goes by without news about deforestation, fires or the invasion of Indigenous territories by gold prospectors or poachers. Some of the changes affecting Indigenous South American communities are less conspicuous and dramatic and yet have equally profound impacts on people's lives. Migration, changing forms of subsistence, integration into the market economy and the introduction of schooling are ubiquitous phenomena with deep cultural and ecological consequences (Alexiades 2009; High and Oakley 2020).

The region has also occupied an important place in recent anthropological debates about human–environment relations, Indigenous cosmologies, nonhuman personhood and relational ontologies (Brightman et al 2012; Di Giminiani 2015; Kohn 2013; Kopenawa and Albert 2013 [2010]). Scholars such as Eduardo Viveiros de Castro (1998) and Philippe Descola (2013 [2005]) have mobilised ethnographies from the Indigenous Americas to offer fresh critiques of the Western dichotomy of nature and culture with repercussions well beyond the discipline.

But while there is a wealth of ethnography detailing the effects of environmental change on Indigenous South American communities as well as their understandings of and interactions with nonhuman living beings, objects and places, save the aforementioned exceptions, the regional literature offers no accounts of how children learn about the worlds in which they live and their human and nonhuman inhabitants, how they are affected by environmental and social changes and how they respond to them. This is despite the fact that children now compose the largest demographic group in Indigenous Lowland Latin American populations (McSweeney and Arps 2005). By focusing on children and children's learning processes, our authors provide an important and heretofore neglected perspective on a region that has made crucial contributions to the anthropology of nature and the environment. Nonetheless, this collection is not intended primarily as a contribution to the regional literature. Our aim is to start a broader conversation about children's relation to the environment that will be of interest to anthropologists from regions across the globe. In this introduction, we will thus briefly conceptually situate the contributions in regards to child socialisation, the environment and sociocultural change.

Children and Socialisation

It is through everyday interactions during childhood that most of our basic dispositions, understandings and skills are learned – including those about the environment. In this special issue, we include many of these processes under the conceptual umbrella of ‘socialisation’. Inspired by work in linguistic anthropology (Ochs and Schieffelin 2011) and developmental psychology (Rogoff 2003), we understand socialisation as a fundamentally intersubjective, bidirectional, open-ended and indeterminate process. There have been recurrent critiques of the concept of socialisation as deterministic or teleological, framing children as passive receivers of sociocultural knowledge and skills. However, we believe that in putting the focus on the ‘social’, the concept highlights an important aspect of child development that conventional terms such as ‘learning’ or ‘education’ often fail to capture: becoming a competent member of a community is a process that fundamentally relies on social interactions with others in shared cultural activities, starting at birth.

As children grow up, they are indeed guided and aided by others, including caregivers and peers, who play a fundamental role in their ‘education of attention’ (Gibson 2014 [1979]: 243). As Alessandro Duranti (2009: 1–2) puts it, children participate in many interactions that are ‘explicitly aimed at directing and redirecting their social, emotional, and moral engagement with their surrounding world – a world made of people, animals, food, artifacts, things of nature, and, at times, spirits or other kinds of supernatural beings’. Such interactions, however, are joint enterprises that rely on the active participation of children who often have their own ideas and goals. Far from merely reproducing cultural patterns of their communities, children are often agents of change. Among the articles in this collection, this is perhaps most apparent in Clarice Cohn’s discussion of Xikrin children, who developed skills such as swimming and fishing in the river that elder generations who grew up in the forests never acquired. Young children are certainly often ‘novices’ that learn from their elder siblings or parents as ‘experts’. But these roles can also be the reverse, for instance, when Xikrin children assist their grandparents in river-related activities. As parents socialise children, children also socialise their parents. With many of the modern innovations it is often children that ‘guide their elders through the thickets of a brave new world’ (Ochs and Schieffelin 2011: 4).

The articles in this collection focus on middle childhood and adolescence. Middle childhood constitutes a ‘sweet spot’ of ontogenetic development, a niche for creative play and experimentation with resources provided by their society (Goodwin 2006). It is here that children develop both heightened awareness of cultural and moral values (Jambon and Smetana 2014) and heightened sensitivity to the environment, the quality to be open to, respond to and adjust themselves to their surroundings (Del Giudice 2014). Adolescence marks the passage from childhood to adulthood, claiming full membership of a community, but can also be a site of resistance and contestation of the givens of adult society. Youth often display ambivalent stances towards their local culture and create new identities from different resources, which is important for understanding cultural change (Bucholtz 2002). In the contexts of Indigenous South America, adolescents are more likely to leave their home community, enter new foreign spaces and experience disruptive changes (Virtanen 2012).

Socialisation patterns and the learning trajectories to which they give rise differ widely in communities across the world (Ochs and Schieffelin 1984; Whiting and Whiting 1975). Among the more prominent differences that are widely discussed in the literature is the relative freedom, autonomy and responsibility (Mezzenzana 2020; Ochs and Izquierdo 2009) that children enjoy in many of the world's Indigenous communities. Equally widespread are modes of learning that entail active participation in everyday activities. Frequently contrasted with Western-style 'assembly-line' modes of instruction, such as school classrooms in industrialised countries, where information is transmitted 'outside the context of productive, purposive activity' (Rogoff et al 2003: 176), in many Indigenous communities, including those featured here, learning occurs through 'intent participation' (Rogoff et al 2003) and observing and pitching in (Paradise and Rogoff 2009) as participants go about their everyday tasks. Children eagerly participate in productive activities even if parents make little to no efforts to guide them (Medaets 2016). To be sure, as has been frequently pointed out, even in post-industrialised Western societies a large part of socialisation and learning occurs through observation and participation, despite an ideology that valorises the decontextualised transmission of abstracted knowledge (Paradise and Rogoff 2009). Nevertheless, in rural contexts such as that described by Giovanna Bacchiddu (this issue) on the Chilean island of Apiao, such informal learning is often explicitly denigrated by school representatives, leading to conflicts about the value of certain types of work and activities.

Throughout the articles, our contributors emphasise how learning by doing is a central trope in the communities where they work and how this is, in turn, enabled by both the freedom children have to move across different spaces and the autonomy they are encouraged to cultivate. But they also show that it does not indiscriminately apply to all contexts and situations, nor equally to boys and girls. For instance, Antonella Tassinari (this issue) argues that while there is a general cultural principle of 'freedom' that orients Galibi-Marworno children's learning across different spaces – gardens, forests, villages and cities – their freedom to roam is relative to who 'owns' these spaces. Some environments are more dangerous than others, not only because of their physical characteristics, but also because of the human and nonhuman inhabitants to whom they may belong. Learning the skills necessary to navigate these environments thus inevitably entails coming to understand their social nature, which places constraints on the freedom and autonomy children otherwise enjoy. Drawing attention to this social nature of environments raises the question of how we use this term.

Learning With, Within and Across Environments

The 'environment' is an elusive concept. It shifts and changes depending on the context in which it occurs. Even in the preceding paragraphs we have already used it in a variety of ways, and thus it behoves us to spend a few paragraphs situating ourselves in relation to common understandings of the term and giving our rationale for using it in this special issue.

The most common understanding of 'environment' is as an umbrella term for the physical world in which we live, and in that sense, it has been of interest to anthropol-

ogists since the inception of our discipline. We have studied different physical environments to understand how they afford or constrain particular modes of subsistence or political organisation (Orlove 1980). We have also looked at how humans give meaning to such environments through systems of classification (Durkheim and Mauss 1963 [1903]). In both cases, the environment functions primarily as a ‘context’ for human action, but remains in and of itself more or less stable – semantically (and historically) close to the concept of ‘nature’ as that which is ‘objectively given and separate from humans’ (Howell 1996: 130).¹

More recent research has challenged such understandings largely from two angles. First, archaeologists and anthropologists have shown that human communities have been not merely been adapting to and classifying but also shaping and altering the physical environments they inhabited for millennia – much of this research coming from the Amazon region (Balée 2013; Heckenberger and Neves 2009; Kawa 2016).² Second, anthropologists have challenged the dichotomy of nature and culture as a historically and regionally specific construct (Latour 1993 [1991]). Drawing largely on ethnographic accounts from Amerindian Indigenous communities (Descola 2013 [2005]; Lima 2000; Viveiros de Castro 1998), this critique turns to Indigenous understandings of their lifeworlds not simply as alien ways of classifying nonhumans, and rather as radical challenges to categories such as humanity, animality or personhood and the ways in which these are used to describe different kinds of entities. What Euro-Americans would usually categorise as elements of ‘nature’, such as animals, plants, certain objects or features of the landscape, Amerindian societies frequently conceive as subjects with agency and personhood (Brightman et al 2012; Costa and Fausto 2010).

This subjectification of the world has far-reaching consequences for how the environment is approached in everyday life and especially with regard to children’s learning processes. In South American Indigenous societies, children’s socialisation is understood not just as a process of learning cultural knowledge and skills together with human caregivers and peers. Rather, this process is part and parcel of the making of particular bodies, which are shaped by ‘all the myriad materials that impinge upon or enter [them], whether in a controlled fashion or simply through chance contact’ (McCallum 1996: 354). Fernando Santos-Granero (2012: 181) defines this as a ‘constructional approach’ to selfhood, in which the person who we become is the compound result of the ‘creational, generative, and socialising contributions of a variety of human and nonhuman entities’. Far from a mere context, in this characteristically Amerindian somatic way of becoming, the environment plays an active part in the making of people.

A prominent theorist who has never lost sight of the multiple ways in which the environments we inhabit affect us is Tim Ingold. He insists that for the concept of ‘environment’ to be useful at all, we must distinguish it strictly from that of ‘nature’. The environment is the world as it exists in relation to an organism, which emerges together with it through its activities; organism and environment are thus an ‘indivisible totality’ (Ingold 2000: 19–20). Moreover, environments are ‘fundamentally historical’, continuously being shaped by us as we are shaped by them. Ingold is influenced by psychologist James J. Gibson, whose notion of ‘affordance’ is key to his ecological

approach to human perception. In Gibson's theory of perception an 'environment' amounts to a set of affordances, what he also calls 'an ecological niche' (Gibson 2014 [1979]: 128). Affordances are 'possibilities for action' that emerge from the interaction between the perceiver and the perceived. They are simultaneously natural and cultural, combining the physical characteristics of an entity with the uses, meanings and values that it has for a particular organism engaging with it, whether human or nonhuman.

It is in this broader sense that we use the term here, in an attempt to capture its shifting and inevitably 'bio-social' nature (Ingold and Pálsson 2013). If at times such usage may seem imprecise it is nonetheless intended as it avoids artificially separating 'natural' and 'cultural' aspects of environments, and to do justice to the fact that in Indigenous understandings these are inextricably intertwined. Even in those cases where the term may seem to be referring narrowly to the physical surroundings, we must bear in mind that those surroundings are never devoid of meaning, value and agency, all of which are part of the specific affordances that give shape to children's activities within these spaces.

A school classroom on the Chilean island of Apiao, for instance, as an enclosed space with benches, information written on a blackboard, and associated cultural meanings about knowledge and educational practices, offers different possibilities for action than the open spaces of potato fields and beaches (Bacchiddu this issue). Likewise, in Galibi-Marworno communities, the gardens, river and houses occupied by a tightly knit kin group, alongside the cultural meanings and moral values embedded within these spaces shape the kinds of interactions that children should and should not engage in (Tassinari this issue). And it is because of the specific affordances of the Andean mountain forests that Pehuenche families in southern Chile choose to spend the summer months in the *veranada*, each family by themselves in small shelters dispersed across the terrain (Piña this issue). The sensorial experiences in these spaces – the cold temperatures, the physical exhaustion from pine nut gathering, the close encounters with nonhumans and the stories that certain places evoke – contrast starkly with life in their lowland winter communities and are crucial for shaping children's development of understandings of and relations with the nonhuman world. Thus, this environment is a core participant in children's socialisation, a powerful actant that makes a difference in children's learning trajectories.

A recurrent theme across the contributions is mobility. Everyday life in the communities discussed in this special issue takes place more often than not in multiple and sometimes radically different environments, as people transit through villages, gardens, forests, rivers, cities and the educational spaces created by schools. The respective affordances of all these different places present different challenges and opportunities for adults and children alike, yet it is often children who explore novel ways of interacting with different environments. Young Wapishana girls develop a new relationship to the spirit world in response to their move to a new environment, a boarding school (Stafford-Walter this issue). Among the Xikrin (Cohn this issue), who have moved from the forest to the banks of a river where they can access schools and health centres, children have been the ones who learned how to swim, how to manoeuvre a canoe, how to fish. However, there is more to this analysis than children's wilful engagement with the river. The river, with its complex life forms, its materiality,

its course, its vegetation, its fish, the flux of people travelling through it, has an existential impact of its own. It is not simply that children pay attention to the river, it is also the river and its ecology that demand that attention. To paraphrase Ingold (2017: 161) who in turn draws on Jan Masschelein's work, children do not only pay attention to the river, but also 'subject themselves to the river', to its material, ecological affordances. The river itself becomes an agent of change.

Environmental and Social Change

Change is something all articles in this special issue grapple with. The experiences of today's Indigenous children differ considerably from those of their predecessors. Whether in Chile, Guayana or Brazil, children experience first-hand the novelties brought by new livelihoods that are marked by radical socio-economic and ecological shifts. Environmental transitions – whether due to ecological change or because of migration to a new space – can have important impacts on family dynamics and children's developmental trajectories (Seymour 2010). Ethnographic accounts of children's lives thus provide us with a privileged window on change. Focusing on the mutual involvement, intersubjectivity and bidirectionality of socialisation processes allows us to document 'not only how and when practices are acquired, but also how and when they are acquired differently from what was intended, or not acquired at all' (Kulick and Schieffelin 2004: 352).

The often different experiences of children when compared to those of their parents and grandparents are of great concern to our Indigenous interlocutors, who often complain that children do not live the way that their ancestors used to. On the island of Apiao in Chile, the enclosed spaces and modes of learning promoted in schools are at odds with Indigenous ideals of virtuous behaviour. The Wapishana lament that young people fail to build strong relationships with nonhumans in their home communities after moving to boarding schools (Stafford-Walter, this issue). This change is at the root of a mysterious sickness that affects young Wapishana girls living in these schools, manifested by the emergence of a new spiritual entity in the form of a grandmother, which forcefully attacks them and attempts to bring them home.

The threat of losing the possibility of forming relationships with nonhumans is what Pehuenche parents try to pre-empt by taking their children on the annual *veranada* trips, where children will be able to develop strong and resilient bodies (Piña, this issue). Thus, the environments between which they move back and forth, while primarily associated with different seasons, also index a distinction between present and past ways of life. Moving to the *veranada* is thus not only a seasonal movement, but also a movement back in time to when there were no schools and when families could stay there for half a year. Adults emphasise the importance of bringing their children to these spaces precisely because of the accumulated past experiences that are inscribed in the landscape and invoked in storytelling (Basso 1996). Indeed, common to all the articles in this Special Issue is adults' emphasis of the importance of maintaining ties to specific places and the nonhumans that inhabit them. These include forms of emotional belonging, ownership, use of land and familiarity with certain activities.

Our contributors also show that it would be wrong to assume a direct causal relationship between environmental and social change, in which migration, sedentarisation or the establishment of schools in Indigenous communities would inevitably point to the 'loss' of Indigenous 'culture'. In the wake of contact with colonial and national societies, many Amerindian communities have shown a keen interest in the objects, knowledge and beliefs of non-Indigenous outsiders. Rather than representing the deliberate abandonment of projects of cultural production (Robbins 2005), this orientation must be understood within Indigenous patterns of meaning. Many Amerindian communities are predicated on an 'openness to the other' (Lévi-Strauss 1995 [1991]), a broad orientation towards alterity within which the incorporation of knowledge and skills acquired from others are central to becoming a person and reproducing community. At times, these others are nonhuman beings, animals or spirits, who are frequently sought out for certain cherished qualities. But they may also be non-Indigenous people, who often occupy similar positions on a gradient of alterity (Santos-Granero 2009). Understood in this light, as Antonella Tassinari and Clarice Cohn (2009) have forcefully argued, many Indigenous communities do not understand the adoption of national models of schooling in terms of transformation or loss, and rather as the appropriation of knowledge from outsiders, establishing lasting relationships with them, that follows traditional Indigenous patterns of reproducing their ways of being. In this special issue, Cohn observes that among the Xikrin it was precisely this openness that compelled children to turn to non-Indigenous people, such as the personnel of the Brazilian National Indian Foundation (FUNAI), to acquire the necessary skills to manoeuvre boats on the river, since their parents and grandparents knew nothing about rivers. What counts as 'change' or 'transformation' may thus be very different from the perspective of different stakeholders (Viveiros de Castro 2011 [1992]).

And yet, if openness to 'other knowledge' is a specific Amerindian characteristic, does that mean that Indigenous societies will always continue to change without ever really changing? As Carlos Fausto puts it, 'when we affirm that changes are not merely cultural loss but part of a pattern of allopoietic cultural invention, are we implying that the indigenous world is a machine capable of infinitely digesting the nonindigenous world? What are the limits to and conditions for such an openness to function as a means for indigenous continuity?' (2009: 497).

There is no conclusive answer to this question. We believe, however, that drawing attention to continuities and discontinuities across generations and in the environments in which they find themselves may help shed light on the interplay of all the different elements that participate in the production of sameness and difference of Indigenous identities, bodies and societies across time. It also pushes us to take more seriously the issues of the inherent unpredictability of child learning, of sociocultural processes and of the ways in which local understandings of both of these change.

'Openness', then, also means an openness to the future. What we hope to show in this special issue is that developmental trajectories are fundamentally open. The kinds of people children will become depends on their microhistories as well as on the environments they inhabit, and changes in the latter will impact children's developmental trajectories as well as those of their communities. This is even truer at a time

of impending ecological crisis, felt in South America as elsewhere. The impact that ecological transformations or the encounter of new environments have on Indigenous communities is mediated by children's engagement with them. In turn, children's development, imagination and future trajectories are mediated by the environments in which they grow up.

Childhood and the lived environment have each gained increasing prominence in anthropology in recent decades. Incidentally, both environmental anthropology and the study of children and childhood have thereby challenged the locus of agency in anthropological theory. Environmental anthropologists have contributed to a displacement of agency away from the human. Scholars of child socialisation, in turn, have asked us to acknowledge the agency of children, challenging adult-centric models of sociocultural reproduction and transformation. By thinking children and environment together, we hope that this special issue will contribute new perspectives to both of these fields and open new avenues of research at a time of rapid social and ecological change in South America and elsewhere.

Acknowledgements

For valuable comments on earlier versions of this introduction we thank Alessandro Rippa, Anna Corwin, Elinor Ochs, Teruko Mitsuhashi, our anonymous reviewers, and especially Sally Anderson, whose thorough engagement with our text has greatly contributed to sharpening our thinking on these issues. We thank Isabelle Rivoal and Ville Laakkonen for guiding us through the editorial process. We acknowledge generous funding through an ERC Starting Grant (101117531) to Hauck and a Volkswagen Foundation Freigeist Fellowship (97888) to Mezzenzana.

JAN DAVID HAUCK is a linguistic and psychological anthropologist interested in language socialisation, ethics and morality, human–nonhuman relations, and environmental change. He has been working with the Aché former hunter-gatherers of eastern Paraguay for over a decade. He is currently based at the Rachel Carson Centre for Environment and Society at the Ludwig-Maximilians-Universität München where he directs a cross-environmental and cross-cultural research project investigating the impact of environmental transformations on children's moral socialisation. Email: j.hauck@lmu.de; ORCID: 0000-0001-9818-5303.

FRANCESCA MEZZENZANA is an anthropologist working in the Ecuadorian Amazon. She has been working with the Runa for over a decade. She is currently directing a comparative project on children–environment relationships at the Rachel Carson Centre for Environment and Society at the Ludwig-Maximilians-Universität München. Francesca is particularly interested in human–nonhuman relationships, child socialisation, cognition, emotions and morality. Email: francesca.mezzenzana@rcc.lmu.de; ORCID: 0000-0003-0867-4715.

Notes

1. Indeed, in everyday use the term is frequently associated with ‘the natural world’. This world may be appreciated, destroyed or protected by humans, but it exists prior to and outside the symbolic worlds we create.
2. That forests have been bearing human signatures for a long time is not to deny the qualitative and (especially) quantitative difference of contemporary anthropogenic environmental transformation. The rapid destruction of the Amazon and the devastating impact that illegal logging, mining or the construction of hydroelectric dams has on Indigenous communities have placed the region front and centre in contemporary discussions of climate change, conservation, Indigenous rights and extractivist capitalism.

References

- Alexiades, M. N. (ed.) 2009. *Mobility and migration in indigenous Amazonia: contemporary ethnoecological perspectives*. New York: Berghahn Books.
- Allerton, C. (ed.) 2016. Introduction, in *Children: ethnographic encounters*. New York: Bloomsbury Academic.
- Balée, W. 2013. *Cultural forests of the Amazon: a historical ecology of people and their landscapes*. Tuscaloosa, AL: University of Alabama Press.
- Basso, K. H. 1996. *Wisdom sits in places: landscape and language among the western Apache*. Albuquerque, NM: University of New Mexico Press.
- Bird-David, N. 2008. ‘Feeding Nayaka children and English readers: a bifocal ethnography of parental feeding in “The Giving Environment”’, *Anthropological Quarterly* 81: 523–550.
- Brightman, M., V. E. Grotti and O. Ulturgasheva (eds.) 2012. *Animism in rainforest and tundra: personhood, animals, plants and things in contemporary Amazonia and Siberia*. New York: Berghahn Books.
- Bucholtz, M. 2002. ‘Youth and cultural practice’, *Annual Review of Anthropology* 31: 525–552.
- Cohn, C. 2006. *Relações de diferença no Brasil Central: Os Mebengokrê e seus outros*. PhD dissertation. Universidade de São Paulo.
- Costa, L., & Fausto, C. 2010. ‘The Return of the Animists: Recent Studies of Amazonian Ontologies’, *Religion and Society*, 1(1), 89–109.
- de la Cadena, M. 2015. *Earth beings: ecologies of practice across Andean worlds*. Durham, NC: Duke University Press.
- Del Giudice, M. 2014. ‘Middle childhood: an evolutionary-developmental synthesis’, *Child Development Perspectives* 8: 193–200.
- Descola, P. 2013 [2005]. *Beyond nature and culture*, J. Lloyd (trans.). Chicago, IL: University of Chicago Press. Originally published as *Par-delà nature et culture* (Paris: Gallimard).
- Descola, P. and G. Pálsson (eds.) 1996. *Nature and society: anthropological perspectives*. London: Routledge.
- Di Giminiani, P. 2015. ‘The becoming of ancestral land: place and property in Mapuche land claims’, *American Ethnologist* 42: 490–503.
- Duranti, A. 2009. ‘The relevance of Husserl’s theory to language socialization’, *Journal of Linguistic Anthropology* 19: 205–226.
- Durkheim, É. and M. Mauss 1963 [1903]. *Primitive classification*, R. Needham (trans.). Chicago, IL: University of Chicago Press.
- Fausto, C. 2009. Comment to Fernando Santos-Granero, ‘Hybrid bodyscapes: a visual history of Yanéscha patterns of cultural change’, *Current Anthropology* 50: 477–512.
- Gibson, J. J. (1979) 2014. *The ecological approach to visual perception*. London: Psychology Press.
- Goodwin, M. H. 2006. *The hidden life of girls: games of stance, status, and exclusion*. Malden, MA: Blackwell.

- Heckenberger, M. and E. G. Neves 2009. 'Amazonian archaeology', *Annual Review of Anthropology* 38: 251–266.
- High, C. and R. E. Oakley 2020. 'Conserving and extracting nature: environmental politics and livelihoods in the new middle grounds of Amazonia', *The Journal of Latin American and Caribbean Anthropology* 25: 236–247.
- Howell, S. 1996. Nature in culture or culture in nature? Chewong ideas of humans and other species, in P. Descola and G. Pálsson (eds.), *Nature and society: anthropological perspectives*, 127–144. London: Routledge.
- Ingold, T. 2000. *The perception of the environment: essays on livelihood, dwelling and skill*. London: Routledge.
- Ingold, T. 2017. 'Prêter attention au commun qui vient: conversation avec Martin Givors & Jacopo Rasmi', *Multitudes* 68: 157–169.
- Ingold, T. and G. Pálsson 2013. *Biosocial becomings: integrating social and biological anthropology*. Cambridge: Cambridge University Press.
- Jambon, M. and J. G. Smetana 2014. 'Moral complexity in middle childhood: children's evaluations of necessary harm', *Developmental Psychology* 50: 22–33.
- Kawa, N. C. 2016. *Amazonia in the Anthropocene: people, soils, plants, forests*. Austin, TX: University of Texas Press.
- Kohn, E. 2013. *How forests think: towards an anthropology beyond the human*. Berkeley, CA: University of California Press.
- Kopenawa, D. and B. Albert 2013 [2010]. *The falling sky: words of a Yanomami shaman*, N. Elliott and A. Dundy (trans.). Cambridge, MA: Harvard University Press. Originally published as *La chute du ciel: paroles d'un chaman yanomami* (Paris: Librairie Plon).
- Kothari, A., A. Salleh, A. Escobar, F. Demaria and A. Acosta 2019. *Pluriverso: un diccionario del posdesarrollo*. Quito: Editorial Universitaria Abya Yala.
- Kulick, D. and B. B. Schieffelin 2004. Language socialization, in A. Duranti (ed.), *A companion to linguistic anthropology*, 347–368. Malden, MA: Blackwell.
- Lancy, D. F. 2008. *The anthropology of childhood: cherubs, chattel, changelings*. Cambridge: Cambridge University Press.
- Latour, B. 1993 [1991]. *We have never been modern*, C. Porter (trans.). Cambridge, MA: Harvard University Press. Originally published as *Nous n'avons jamais été modernes: essai d'anthropologie symétrique* (Paris: La Découverte).
- Lévi-Strauss, C. 1995 [1991]. *The story of Lynx*, C. Tihanyi (trans.). Chicago, IL: University of Chicago Press. Originally published as *Histoire de Lynx* (Paris: Librairie Plon).
- Lima, T. S. 2000. 'Towards an ethnographic theory of the nature/culture distinction in Juruna cosmology', F. Tornabene de Sousa (trans.), *Brazilian Review of Social Sciences* special issue 1: 43–52.
- McCallum, C. 1996. 'The Body that Knows: From Cashinahua Epistemology to a Medical Anthropology of Lowland South America', *Medical Anthropology Quarterly* 10: 347–72.
- McSweeney, K. and S. Arps 2005. 'A demographic turnaround: the rapid growth of the indigenous populations in lowland Latin America', *Latin American Research Review* 40: 3–29.
- Medaets, C. 2016. 'Despite adults: learning experiences on the Tapajós river banks', *Ethos* 44: 248–268.
- Mezzenzana, F. 2020. 'Between will and thought: individualism and social responsiveness in Amazonian child rearing', *American Anthropologist* 122: 540–553.
- Morelli, C. 2017. 'The river echoes with laughter: a child-centred analysis of social change in Amazonia', *Journal of the Royal Anthropological Institute* 23: 137–154.
- Ochs, E. and C. Izquierdo 2009. 'Responsibility in childhood: three developmental trajectories', *Ethos* 37: 391–413.
- Ochs, E. and B. B. Schieffelin 1984. Language acquisition and socialization: three developmental stories and their implications, in R. A. Shweder and R. A. LeVine (eds.), *Culture theory: essays in mind, self, and emotion*, 276–320. Cambridge: Cambridge University Press.

- Ochs, E. and B. B. Schieffelin 2011. The theory of language socialization, in A. Duranti, E. Ochs and B. B. Schieffelin (eds.), *The handbook of language socialization*, 1–21. Chichester: Wiley-Blackwell.
- Orlove, B. S. 1980. 'Ecological anthropology', *Annual Review of Anthropology* 9: 235–273.
- Paradise, R. and B. Rogoff 2009. 'Side by side: learning by observing and pitching in', *Ethos* 37: 102–138.
- Robbins, J. 2005. The humiliations of sin: Christianity and the modernization of the subject among the Urapmin, in J. Robbins and H. Wardlow (eds.), *The making of global and local modernities in Melanesia: humiliation, transformation and the nature of cultural change*, 43–56. Burlington, VT: Ashgate.
- Rogoff, B. 2003. *The cultural nature of human development*. Oxford: Oxford University Press.
- Rogoff, B., R. Paradise, R. M. Arauz, M. Correa-Chávez and C. Angelillo 2003. 'Firsthand learning through intent participation', *Annual Review of Psychology* 54: 175–203.
- Santos-Granero, F. 2009. 'Hybrid bodyscapes: a visual history of Yanesha patterns of cultural change', *Current Anthropology* 50: 477–512.
- Santos-Granero, F. 2012. 'Beinghood and people-making in Native Amazonia: a constructional approach with a perspectival coda', *HAU: Journal of Ethnographic Theory* 2: 181–211.
- Seymour, S. C. 2010. 'Environmental change, family adaptations, and child development: longitudinal research in India', *Journal of Cross-Cultural Psychology* 41: 578–591.
- Tassinari, A. I. and C. Cohn 2009. 'Opening to the other: schooling among the Karipuna and Mebengokré-Xikrin of Brazil', *Anthropology & Education Quarterly* 40: 150–169.
- Toren, C. 1999. *Mind, materiality and history: explorations in Fijian ethnography*. London: Routledge.
- Toren, C. 2012. 'Imagining the world that warrants our imagination: the revelation of ontogeny', *The Cambridge Journal of Anthropology* 30: 64–79.
- Virtanen, P. 2012. *Indigenous youth in Brazilian Amazonia: changing lived worlds*. London: Springer.
- Viveiros de Castro, E. 1998. 'Cosmological deixis and Amerindian perspectivism', *Journal of the Royal Anthropological Institute* 4: 469–488.
- Viveiros de Castro, E. 2011 [1992]. *The inconstancy of the Indian soul: the encounter of Catholics and cannibals in sixteenth-century Brazil*, G. D. Morton (trans.). Chicago, IL: Prickly Paradigm Press.
- Walker, H. 2013. *Under a watchful eye: self, power, and intimacy in Amazonia*. Berkeley, CA: University of California Press.
- Whiting, B. B. and J. W. M. Whiting 1975. *Children of six cultures: a psycho-cultural analysis*. Cambridge, MA: Harvard University Press.
- Whyte, K. 2018. 'Settler colonialism, ecology, and environmental injustice', *Environment and Society* 9: 125–144.

Grandir face au changement: La transformation de l'environnement et la socialisation enfantine en Amérique du Sud autochtone

Résumé : Le rapport des êtres humains avec le reste du monde est devenu un sujet central en anthropologie au cours des dernières années. En parallèle, il existe un regain d'intérêt pour les communautés autochtones. Celles-ci sont les plus vulnérables face au changement de l'environnement et, en même temps, elles nous montrent des façons alternatives pour établir un rapport avec le monde naturel. Mais les enfants sont rarement évoqués dans ces débats. Les enfants vont subir les conséquences de changements à long terme. De plus, les façons de se rapporter à l'environnement et aux habitants (êtres humains et autres espèces) sont appris pendant la socialisation enfantine. Ce dossier étudie la socialisation enfantine face au changement de l'environnement. À travers des études de cas, de Guyane au Chili du Sud, nos auteurs examinent les façons d'apprentissage, l'impact de déménagement aux espaces nouveaux, comment les enfants apprennent à naviguer ces espaces, et

les relations établies par les enfants. Notre introduction offre une vue d'ensemble de notre approche à la socialisation enfantine, l'environnement, le changement et la transformation.

Mots-clés : basses-terres de l'Amérique du Sud, changement culturel, enfance, environnement, rapports entre les êtres humains et les autres espèces, peuples autochtones, socialisation

Crescer diante da mudança: Transformação ambiental e socialização infantil na América do Sul indígena

A relação entre humanos e o mundo não-humano se tornou um tema central na antropologia nos últimos anos. Isso também gerou um interesse renovado nas comunidades indígenas, como as mais vulneráveis às mudanças do meio ambiente, ao mesmo tempo em que podem oferecer maneiras alternativas de se relacionar com ele. Entretanto, muito pouca atenção tem sido dada às crianças nesses debates. As crianças sofrerão as consequências de longo prazo dessas mudanças. Por sua vez, as formas de se relacionar com o meio ambiente e seus habitantes, humanos e não-humanos, são socializadas durante a infância. Esta edição especial explora a socialização das crianças diante das mudanças ambientais. Por meio de estudos de caso etnográficos da Guiana ao sul do Chile, nossos colaboradores discutem formas de aprendizagem em diferentes ambientes, o impacto de se mudar para novos espaços, como as crianças aprendem a navegar por eles e as relações que constroem com outros seres. Nossa introdução fornece uma visão geral conceitual de nossa abordagem à socialização infantil, ambiente, mudança e transformação.

Palavras-chave: infância, socialização, meio ambiente, povos indígenas, América do Sul indígena, relações entre humanos e não-humanos, mudança cultural

Creciendo ante el cambio: Transformación ambiental y socialización infantil en la América del Sur indígena

La relación de los humanos con el mundo no-humano se ha convertido en un tema central en la antropología en los últimos años. Esto también ha generado un renovado interés en las comunidades indígenas, como las más vulnerables a los cambios del medio ambiente, a la vez que ofrecen modos alternativos de relacionarse con él. Sin embargo, se ha prestado muy poca atención a los niños en estos debates. Los niños sufrirán las consecuencias a largo plazo de los cambios. A su vez, los modos de relacionarse con el medio ambiente y sus habitantes, humanos y no-humanos, se socializan durante la infancia. Este número especial explora la socialización infantil ante los cambios ambientales. A través de estudios de caso etnográficos desde Guyana hasta el sur de Chile, nuestros colaboradores discuten los modos de aprendizaje en diferentes entornos, el impacto de mudarse a espacios nuevos, cómo los niños aprenden a navegar por ellos y las relaciones que construyen con otros seres. Nuestra introducción ofrece una visión general conceptual de nuestro enfoque sobre la socialización infantil, el medio ambiente, el cambio y la transformación.

Palabras clave: infancia, socialización, medio ambiente, pueblos indígenas, Sudamérica indígena, relaciones entre humanos y no-humanos, cambio cultural