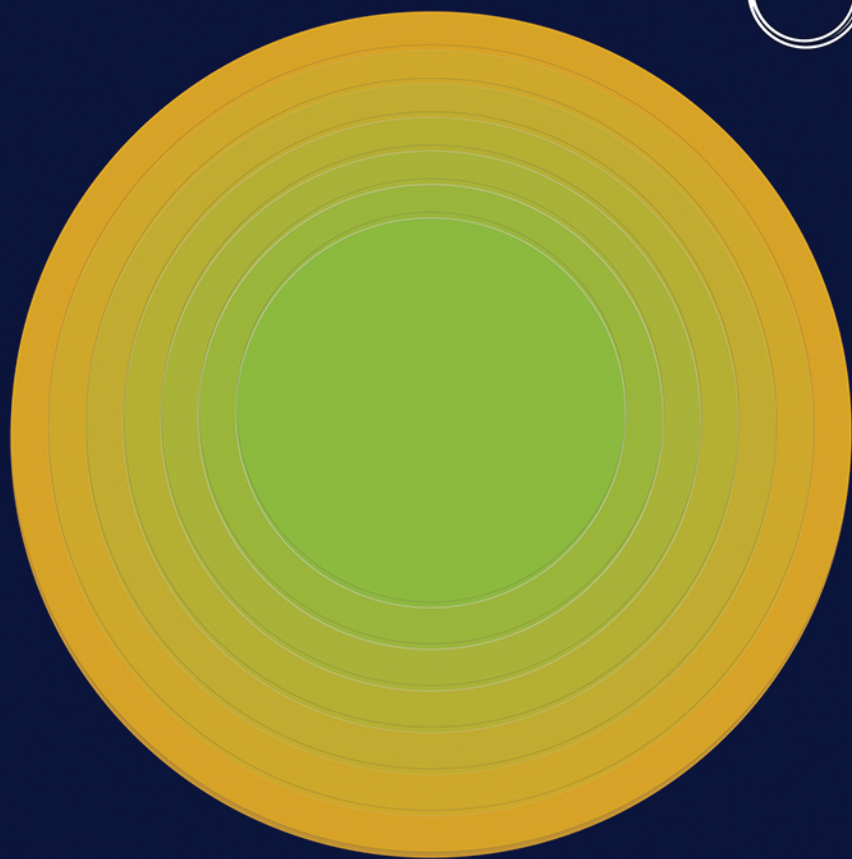




SOUTHERN EPISTEMOLOGIES

Knowledge, Wisdom, and Understanding
in the Andes and Western Amazon

Edited by H. Clark Barrett, Michael L. Cepek,
Pablo Quintanilla, Emanuele Fabiano,
and Edouard Machery

Southern Epistemologies



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Notes on Contributors

Medardo Arahuañi Manizari was born in 1950 on the banks of the Tigrillo River. Considered a wise man (*ichauñena*) and skilled shaman, he devoted his later years to recording and disseminating the narratives, songs, and shamanic knowledge of the Urarina people. Medardo passed away in the community of Nueva Unión, Río Chambira, in 2021.

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CHAPTER I

Indigenous Epistemologies and Their Others

H. Clark Barrett

Knowledge is essential, delightful, human—as that you should never wash a pie plate or a rolling pin; science, as the codified sum of knowledge is stupid and inhuman—unless we achieve toward it the same relationship that we find most essential, delightful, human, in any of its parts.

William Carlos Williams, *The Embodiment of Knowledge*
(1974: 63)

“Epistemology,” a word coined in mid-nineteenth-century Europe, is a neologism based on the Greek root *episteme*, which refers to knowledge or understanding (Steup and Neta 2020; Woleński 2004). While the word is relatively new in origin, it refers to a specific European historical tradition of the study of knowledge, dating back to the ancient Greeks (Stich and Mizumoto 2018). The term thus carries some ambiguity. When we use it, are we referring to a specific philosophical tradition rooted in the European academy? Or to all approaches to understanding knowledge?

This volume and its companion (Quintanilla et al. 2023) intend the concept in the latter, broad sense. We use the term “epistemologies” to refer to the many ways that people, often outside of the academy, think

about, conceptualize, valorize, and approach knowledge. The goal is not to ignore or dismiss technical academic approaches to epistemology but to focus instead on other approaches to knowledge and to ask how expanding our view of epistemology to include them might, in the process, increase our understanding of knowledge itself. Contemporary academic approaches to epistemology, often rooted in the formal concepts of logic, mathematics, and the English language, can be seen as just one kind of approach among many. It is worth asking what might be lost by treating academic approaches as the only valid ones.

To do this, we focus on epistemologies of the Global South (Cruz 2018; Ludwig et al. 2021; Makoni et al. 2023; Mungwini 2017; Santos 2015), and, in particular, the epistemological values, attitudes, and practices of Indigenous communities of the Andes and Amazon. To some, this might seem like an overly narrow focus on a particular set of cultural and linguistic traditions. To us, on the contrary, it seems dauntingly broad. We are mindful of, indeed fretful about, the impossibility of covering the immensity of this topic in anything other than a patchwork way. To this end, this volume and its companion are best considered a series of snapshots, a collection of essays on Indigenous epistemologies that began among a group of scholars gathered at a small conference in Lima, and that subsequently expanded from a single planned volume to two as our excitement grew and we invited additional friends and colleagues.¹ We are well aware that the chapters collected here present just one possible assembly of experiences and points of view, covering a tiny fraction of topics and phenomena in the communities in which we work and live. From the outset, then, we see our project not as comprehensive or definitive, but as a starting point, a set of small and particular interventions towards a larger goal.

In this introduction, I sketch some of the topics and questions we aim to address. I ask what is at stake in bringing Indigenous epistemologies into dialogue with their academic, typically non-Indigenous, cousins, and what Indigenous perspectives stand to offer for approaches to knowledge in a rapidly changing world. I then turn to a brief overview

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1. This volume and its companion came to life via the Geography of Philosophy Project, a multiyear, multisite research collaboration aimed at exploring concepts of knowledge, wisdom, and understanding around the world (<https://www.geographyofphilosophy.com/>). Some, but not all, of the contributors to these companion volumes have been participants in this project.

of the volume's chapters, highlighting how each relates to the book's central themes.

What Are Indigenous Epistemologies?

There is a sense in which all epistemologies are, or originate from, Indigenous epistemologies. All are ways of thinking about knowledge that spring from particular cultural traditions; all are views from somewhere (Haraway 1988). As Quintanilla points out, what we call "Western" philosophy was "born, nevertheless, in some small cities in what is now called the Middle East" (2023: 61). A typical introduction to epistemology in philosophy begins by rehearsing the ideas of Greek philosophical ancestors, marking a tradition built on the attitudes, values, and practices of particular times and places. From this point of view, it is the "unmarked" versions of epistemology seen in the academy that are unusual, in that they aspire to a kind of universality by self-consciously attempting to strip themselves of any trace of cultural values (Chakrabarty 1992; Medin and Bang 2014).

One thing this means is that focusing on academic epistemology² as "true" epistemology hurries over the vast majority of attitudes towards knowledge around the world to focus on a highly specialized, self-contained elite whose concern with everyday attitudes towards knowledge

-
2. There is no ideal term to use here, and I will use terms like "academic," "scientific," "philosophical" (and, sometimes, "Western") to refer to varieties of epistemology that attempt to achieve a universalized, distilled, "unsituated" approach to knowledge. In contrasting these with Indigenous epistemologies I do not intend to place them on different levels, nor to draw a strict line between them. Indeed, as feminist and Indigenous scholars of science have argued, supposedly "universal" and "value-free" epistemologies are almost always culturally situated ones that simply pretend to have escaped their historical roots (Deloria et al. 2018; Douglas 2009; El-Hani, Poliseli, and Ludwig 2022; Haraway 1988; Harding 2016; Jasanoﬀ 2004; Kimmerer 2013; Longino 1990; Smith 2019; TallBear 2013; Wynter 2003). The title of this introduction is meant to point to the fact that it is "scientific" epistemologies that self-consciously attempt to distance themselves from Indigenous epistemologies, and not the other way around. As Kim TallBear (2013) has argued, it is possible to reject a binary divide between scientific and Indigenous knowledge, while at the same time recognizing different worldviews and knowledge traditions.

is often as a source of thought experiments and cautionary tales about how we might be wrong. The attitude of the academic epistemologist to folk epistemology might in some sense be akin to the attitude of some academic biologists towards folk knowledge of nature: some interesting things might be found there, but nothing to make us truly think differently, or to challenge, say, biological *theory*.

Biology is an apt domain to illustrate the perils of this dismissive attitude. It is increasingly coming to be recognized (outside of Indigenous communities, of course) that Indigenous knowledge of the natural world is crucial to our understanding of and engagement with nature, as a global species. Indeed, it always has been, it's just that some have forgotten, or actively worked to erase it. There is now a burgeoning literature on Indigenous knowledge of and ethics towards stewardship of the environment, which has taken on increasing urgency in the age of accelerating human-induced environmental change (Anderson 2005; Ban et al. 2018; Berkes, Colding, and Folke 2000; Fletcher et al. 2021; Menzies 2006; Ojeda et al. 2022; Renck et al. 2023; Snively and Corsiglia 2001; Tom, Sumida Huaman, and McCarty 2019; Whyte, Brewer, and Johnson 2016).

While it should be obvious by now, our global environmental predicament is largely the product of colonial practices, knowledge, and attitudes towards “the environment,” construed in a particularly Western/European way as separate from humankind (Ojeda et al. 2022; Whyte, Brewer, and Johnson 2016). As impressive as academic knowledge of ecology is (yet another neologism coined in homage to the Greeks), academic ecologists and policy-makers are now looking to Indigenous ecological knowledge and values to help get us out of this mess. In California, where I live, discussions of the devastating wildfires that ravage the state every year are now inevitably accompanied by discussions of Indigenous stewardship practices, and lamentations that these practices until now have been ignored by settler colonials whose sole goal was to domesticate and often eradicate nature (Anderson 2006; Eriksen and Hankins 2014; Kimmerer and Lake 2001). In North and South America alike, academic ecologists have come to realize that what Europeans initially took as “wilderness” has long been domesticated and managed by humans (Anderson 2005; Balée 2013; Fletcher et al. 2021; Roosevelt 1989, 2013; Shultis and Heffner 2016). Moreover, Indigenous approaches to environmental stewardship often see humans as part of nature: not separate from or above it, but engaged in reciprocity with it (Anderson 2005; Erazo 2013, 2016; Kimmerer 2013; Medin and Bang 2014; Ojeda et al. 2022; Whyte, Brewer, and Johnson 2016).

This reveals the deep entanglement between values, knowledge, and practice often emphasized by Indigenous scholars (Kimmerer 2013; Snively and Corsiglia 2001; Sumida Huaman and Martin 2020). In academic ecology, it took a long time for the field to return to a view, widely held in many Indigenous communities, that humans are but one species among many, and that partitioning out humans from the environment and assuming just one kind of causal relationship (humans adapting to the environment but not vice versa) is a particular, and particularly odd, ontological stance (Krenak 2020). It leads to an incomplete picture not only of ecology, but also of evolution, as the recently popularized concept of “niche construction” in biology shows (Laland, Odling-Smee, and Feldman 2000; Pierotti 2010). Why did it take us so long?

There is, of course, no such thing as a single Indigenous point of view (Cameron, de Leeuw, and Desbiens 2014; see also Arahuate et al. and Hauck, this volume). There is a diversity in approaches to knowledge between communities and within them, around the world and within any geographic region, such as the Andean and Amazonian regions of South America on which this book focuses. In this introduction, I do not intend to speak for or on behalf of Indigenous people, but instead to offer my own situated perspective on what Indigenous epistemologies may offer to the formalized academic epistemologies of philosophy and science—while taking care not to draw a strict boundary between them. My perspective is particularly informed by my training in anthropology and cognitive science as well as what I have learned from Shuar, Achuar, and Shiwiari communities in Ecuador over the decades, and from my readings of Indigenous scholars. It is this personal perspective that shapes my comments here, and my fellow authors in later chapters will choose to emphasize different points and perspectives.

In developing and discussing this project, one attitude that my colleagues and I have encountered from fellow academics is a dismissive one akin to ivory tower attitudes towards Indigenous biology described above. This view can be summarized as follows: Given how elaborate and technical the study of knowledge has become in the academy, what could Indigenous views, or any folk views on the matter, possibly have to offer? One might as well go out in the street and ask passers-by about quantum mechanics.

But this is the wrong analogy. While most of us don’t have access to the phenomena of quantum mechanics, all of us have access to the phenomena of knowledge. And just as Indigenous communities might have unique insights into biology by virtue of individual, collective,

and historical experience of it, so might they have unique insights into knowledge: its acquisition, maintenance, ethics, practice, and nature.

This latter question, the question of what knowledge is, is fundamentally an ontological question, and one that runs throughout this book. Many of the volume's chapters ask: What kind of thing is knowledge, if it is indeed a thing? Most of the Indigenous perspectives surveyed here view knowledge as embodied, incarnated, and made real only through flesh, skill, and action. This challenges the thingness of knowledge as a separable object that could in principle be removed from the body and stored in a book or a computer (Fabiano and Artzi 2023; Fausto 2007; Londoño Sulkin 2012; Rival 2005; Vilaça 2002; see also Cepek & Lucitante and McLachlan, this volume). Questions about the nature of knowledge are intimately related to epistemological questions about where knowledge comes from, what counts as valid knowledge, how knowledge can and should be maintained and circulated, as well as questions about the responsibilities that knowledge entails. Many scholars have argued that ontology and epistemology cannot be disentangled, and, indeed, that their treatment as a discrete binary itself originates in a particular, "Western" academic tradition (Haraway 1988; Kayumova and Strom 2023; Wynter 2003). The chapters in this volume largely support this view. Indigenous perspectives on knowledge urge us to see epistemology and the ontology of knowledge as part of an inseparable whole.

Here I attempt to identify a few themes that run through these chapters and through the literature on Indigenous epistemologies more broadly. In doing so, again, my goal is not to create a strict demarcation between Indigenous epistemologies and their academic kin, but rather to show how some parts of the science of knowledge have, like the science of biology, swung gradually towards Indigenous perspectives. Rather than trying so hard to demarcate "formal science" from "folk science," the academy might have done well to widen its perspective all along. Here, I will touch upon three themes that emerge from my reading of the literatures on Indigenous knowledge: embodiment, entanglement, and ethics.

Embodiment: Knowledge as Skill, Practice, Action

The rush to understand Indigenous environmental stewardship practices springs from the realization, on the part of academics, that there is expertise here that can be found nowhere else. California is not like Europe, or the East Coast, so many practices of managing water and

land imported from there simply won't work. Why wouldn't we expect the people who have been here the longest to possess knowledge that can be gained no other way? And why wouldn't we expect it to be better than a "view from nowhere"?

But we should not limit our view of expertise to the "environment," narrowly construed, nor reinforce the ideological tie between Indigeneity and nature. The scope of knowledge is vast: we have knowledge not just of the world and the beings and object it contains, but also of ourselves and each other. We have knowledge of the abstract and intangible, of history, of relationships, of causes and consequences. We also have knowledge *of* knowledge: we know what it is to know, to not know, to ponder, to learn, to accept the ineffable. Every one of us has expertise about knowledge: experience of it, ideas about it, attitudes towards it. Professional epistemologists, like professional farmers or professional fishers, might be expected to have some special expertise by virtue of the depth and intensity of their practice. But Indigenous communities, like all others, have experts about knowledge, and it would be as foolish to ignore them as to ignore the fishers.

The question "what is knowledge?" is, of course, the bread and butter of traditional academic epistemology (Steup and Neta 2020). But just as we can see the cultural history of academic biology originating in a particular European view of humans as separate from (and dominant over) nature, so we can see the cultural history of academic epistemology originating in particularly European obsessions with logic and language. You can't read very far in the modern analytic epistemological literature without encountering formulations such as "*A* knows that *P*"—almost as if there were no way of doing epistemology without such formalisms, entangled as they are in the world of linguistic and symbolic representations. But is this the only way to do it?

Many Indigenous epistemologies would hold not only that cases of propositional knowledge ("knowing that *P*") constitute just a small part of our knowledge, but also that these are much less important than knowledge that cannot be expressed propositionally—and that instead is embodied and manifested in living, being, and doing (Ikuta 2011). For example, the most commonly used Quechua word for knowledge, *yachay*, specifically emphasizes the embodied, enacted, and practical nature of knowledge—including how it is tied to specific places and times (Andrade Ciudad 2023; Depaz Toledo 2023; Mannheim 2011; Mazzi-Huaycucho 2023; Mujica and Córdova 2023; see also Quintanilla, this volume).

The distinction between propositional and embodied knowledge is not unknown to contemporary academic epistemology, but knowledge of facts has arguably received greater attention than other forms of knowledge until relatively recently. Philosopher Gilbert Ryle (1945) famously distinguished between “knowing how” and “knowing that” in his address to the Aristotelian Society. The point of that address was to disabuse the philosophical audience of certain notions of what knowledge and “intelligence” are, stretching back to Plato: namely, that “intelligence” concerns “the operations of considering propositions” (Ryle 1945: 1). In Indigenous communities and outside of academia more generally, such notions of knowledge might be considered strange—or at least not the typical or most important forms of knowledge that most of us possess.

In psychology, the “cognitive turn” of the 1950s and 1960s, widely held to have revolutionized the field, is seen by some as having reduced all knowledge to the symbolic and propositional. It took decades for notions of embodied and situated cognition—that seem to bear much closer resemblance to parallel notions held by many Indigenous communities—to come (back) into fashion, sometimes with triumphant announcements of (re)discovery (Glenberg, Witt, and Metcalfe 2013). The cognitive science literature on embodiment has tended to focus on formal questions of what it means for knowledge to be embodied in sensory and motor systems in the brain involved in action and its planning (Clark 1999). But there is another aspect of embodiment frequently emphasized by Indigenous people: its connection to the practical, or the useful—and often in a contextually local way (Arahuate et al., this volume).³ Although some branches of science pride themselves on being “pure” and un-applied (e.g., some areas of mathematics and philosophy), such attitudes are almost certainly outliers compared to the attitudes most people have towards knowledge (Douglas 2014). As studies of Indigenous knowledge systems have shown, the ways that knowledge connects to the practical can be elaborate and unexpected, as in

-
3. This is not to imply, of course, that Indigenous epistemologies exclusively valorize practical knowledge, or that they do not value abstract knowledge, or knowledge for knowledge’s sake. The point is that whereas Western epistemology has often seen the decontextualization, depersonalization, and disembodiment of knowledge as virtues, Indigenous epistemologies typically value knowledge because of what it allows people to do (Cepek & Lucitante, this volume).

how understandings of minutiae of animal behavior and plant ecology play roles in practices of hunting and horticulture (Anderson 2005). The valuation of knowledge connected to practice, problem-solving, and local context makes more sense, in many ways, than the strange preference for placing disembodied, decontextualized knowledge at the top. Indeed, from an evolutionary perspective, it is highly likely that our capacities for acquiring knowledge evolved because of their practical effects (Barrett 2015).

Entanglement: Knowledge as Situated and Relational

One could, in principle, regard knowledge as embodied and yet also encapsulated, limited to the narrow domain and reach of the self. Indeed, cognitive science approaches to embodiment are often micro in scale, asking how, for example, toddlers learn to walk via feedback from their limbs or how robots endowed with embodied cognition can more gently lift a cup (Clark 1999). Certainly, such approaches adopt a subjective, situated point of view that they share with many Indigenous epistemologies. But Indigenous epistemologies often view the reach of knowledge, in terms of both its sources and scope of action, as far larger than the individual—and yet neither objective, decontextualized, nor disembodied. This can be seen in many discussions of Indigenous views of knowledge in this volume (Cepek & Lucitante; McLachlan).

It must be emphasized again that there is no single Indigenous point of view on these matters (just as there is no single academic point of view). Some scholars have suggested that there are potentially large differences between European views of the subject–object divide and Indigenous perspectives—but with a wide range of views of what those differences might be (Bird-David 1999; Costa 2018; de la Cadena 2015; Descola 2013; Fausto 2007; Kohn 2013; Medin and Bang 2014; Viveiros de Castro 2014). A common thread that runs through these diverse perspectives is a sense that many Indigenous people view humans and human subjectivity as part of, and entangled with, nature and the world, as opposed to a view of humans as separate from, detached from, or “above” nature and the “external” world.

One can see the influence of the latter view in ways that knowledge has been conceptualized in the European tradition. Examples include Plato’s allegory of the cave, in which the self is boxed off from the world

and perceives it from a distance, and Cartesian mind–body dualism.⁴ In other traditions, including some Indigenous ones, the mind is seen either as porous or as even simply more continuous with nature: situated or embodied knowledge is not just knowledge “coming in” from the outside, but is coconstituted with, and distributed in, the world (Luhmann 2020). This view of knowledge as not purely subjective but partly social, distributed among and emerging from interactions and relations between social and nonsocial agents, challenges some traditional Western assumptions about the subjectivity and individuality of knowledge and action. Things become even more complicated if notions of what counts as a social agent also differ. In Indigenous communities, the realm of the social often extends far beyond humans, spelling trouble for individualist views of knowledge and how it works (de la Cadena 2015; Descola 1996, 2013; Kohn 2013).

Knowledge, from this perspective, becomes not just a view from somewhere, but a view that one does not and cannot hold in isolation (Haraway 1988). This might be contrasted with a kind of epistemic individualism characteristic of some academic and scientific epistemologies (Goldman 1987; Kallestrup and Pritchard 2012). It is not simply a question of whether some people know more or different things than others—this is recognized in all communities, including Indigenous ones. It is that there are many kinds of knowledge whose nature and origin are themselves deeply social. While this is an idea that has become increasingly popular in Western scientific approaches to knowledge, including science itself, social accounts of knowledge and its construction through social processes have gained traction only relatively recently (Berger and Luckmann 1966; Shapin 1995). Similarly, in psychology, the framing of constructs such as “wisdom” has shifted from more individualistic, person-centered approaches towards a view of wisdom as inseparable from social and ecological context (Grossmann, Dorfman, and Oakes 2020). Here again one could argue that the academy took a long detour, only recently returning to perspectives that Indigenous people never forgot.

4. Again, there is no single European point of view here. Aristotle, for example, thought of the soul as embodied. Still, mind–body dualism looms large in contemporary social science, so much so that some scholars regard it as an innate part of human thinking (Berent 2020; Bloom 2005).

Ethics: Knowledge as Power

Formal and scientific epistemologies have endlessly struggled with the question of values, often attempting to isolate purely epistemic values from other kinds, such as aesthetic or ethical ones (Douglas 2009; Harding 2016; Longino 1990). In many formal epistemological frameworks, whether or not you know something might depend on the quality of evidence you receive or how you evaluate it, but not whether or not you are a good person, lead a good life, or embody other cultural values.

Indigenous epistemologies, on the other hand, do not typically attempt to erase their cultural and historical situatedness, and are less concerned than formal philosophical ones with isolating purely epistemic values from other ones. In this sense, many Indigenous epistemologies align with feminist approaches to knowledge and knowledge production which hold that science and other forms of knowledge production are inescapably culture-bound and value-laden. Perhaps the desire to isolate and distill universal rules for achieving pure, unsituated, disembodied knowledge is *itself* a cultural value. If we move away from the so-called value-free ideal of science (Douglas 2009) and towards the Indigenous view of knowledge and values as inseparable, we can arguably expand, rather than contract, the applied human usefulness of epistemology, bringing it into contact with ethics and the quality of life.

Consider, for example, the relationship between knowledge *of* the environment and action *in* the environment—which many Indigenous perspectives would consider, if not one and the same, then at least inseparably interdependent (Mujica and Córdova 2023; see also Arahuate et al. and Cepek & Lucitante, this volume). When allowed to be connected in this way, how one acts on the knowledge one has in turn depends on how one conceptualizes the world and how the things within it stand in relation to each other.

Some approaches to ethics hold that ethics is primarily an inter-subjective affair, concerning the relations between subjects (typically, people—and often only some of them) and the material extensions of subjects such as their property (Zahavi and Overgaard 2020). But this, in turn, is predicated on what counts as a subject. If only humans are subjects, then nonhuman objects are outside of the realm of the ethical, except inasmuch as they are connected to human subjectivity (e.g., as property, or sources of benefit or harm). The isolation of ethics to the human realm is arguably the product of a longstanding European (and Christian) cultural tradition of separating humans (“man”) from the rest

of nature.⁵ For many Indigenous people, nonhumans can be and are subjects. This includes not just animals but also plants, water, and the earth (de la Cadena 2015; Fausto 2007; Kramm 2020). This does not necessarily mean that they are subjects in exactly the same way as humans, but it brings them into the ethical realm as things towards which we, as humans, have relationships, and therefore ethical responsibilities.

For Indigenous people, battles over water and land, such as the recent Dakota Access Pipeline dispute in the United States, are often framed in just this way (Neville and Coulthard 2019). The idea of water as a “resource”—which frames it as an object or possession given value only by virtue of its usefulness to humans—is explicitly rejected by many Indigenous people in favor of water as having rights of its own. As we have seen in other domains, this ethical stance has begun to make its way into the academy and into the thinking of non-Indigenous people. There are now many calls to expand legal rights outside of humans and their property. Peter Singer’s (2011) idea of expanding the “moral circle” beyond humans captures this view, and animal rights movements have gained legal traction around the world. “Rights of nature” laws granting legal rights to nonhuman entities, often spearheaded by Indigenous communities, have made it onto the books in Ecuador, New Zealand, and the United States (Boyd 2017; Cano Pecharroman 2018; Kramm 2020; Macfarlane 2025). As we become a multiplanetary species, Indigenous values could be crucial to countering the explicitly extractivist ideologies that frequently accompany discourses of “colonizing” other worlds.

As part of the refusal to separate knowledge and ethics, Indigenous communities and scholars have been at the forefront of efforts to understand and expose relationships between knowledge and power, including relationships that the value-free ideal of science can conceal (Douglas 2009). These include contestations of attitudes towards knowledge that are taken by many Europeans to be self-evident, such as the view that Indigenous languages and cultural practices are the patrimony and property of “all humankind” (Hill 2002). Many Indigenous communities view some knowledge as sacred, private, and proprietary—rightly viewing knowledge as connected to power (Debenport 2010; see also Arahuate et al., this volume). Debates over ethical malpractice in museums and archives, extractive genomic and biomedical research, and appropriation of Indigenous knowledge without community consent suggest a shift

5. Again, there is a diversity in the European tradition, and scholars such as Bentham and Montaigne rejected this approach.

in global worldviews towards the realization that not all community knowledge is public property, free for the taking or fair game for monetization (Hudson et al. 2020; Kukutai and Taylor 2016; Mangola et al. 2022; Mgbeoji 2014; Tsosie et al. 2021). The circulation of knowledge has ethical entailments and can sometimes cause real harm. Here again, by refusing a strict separation of knowledge, action in the world, and ethics, Indigenous perspectives may prove of critical importance in questioning ideologies of knowledge which, in the name of universalism, may actually be in the interests of only a few.

Situating This Volume

By titling our volume *Southern Epistemologies*, our goal is not to address all epistemologies of the Global South. Instead, we have assembled an array of contributors whose work focuses on specific communities and phenomena within the huge diversity of South American cultures, in the hope of contributing to and engaging with the growing bodies of scholarship on Southern epistemologies and Indigenous epistemologies worldwide (Langa and Gonçalves 2022; Ludwig et al. 2021; Makoni et al. 2023; Santos 2015). We do not presume that South America is representative of the Global South, nor even that the communities represented in this volume are representative of South America. Instead, our commitment is to all epistemologies as equally valid exemplars of human approaches to knowledge, wisdom, and understanding. The essays collected here and in the companion volume represent diverse perspectives and starting places for dialogues about knowledge and the many ways it can be approached, understood, valued, and enacted.

The Andean and Amazonian regions of South America, on which we focus here, are vitally important for understanding Indigenous conceptions of knowledge, wisdom, and understanding. This is particularly so given the diversity of cultural traditions in these regions. The Andes and Amazon each contain a vast cultural and linguistic diversity and also differ in their cultural perspectives in many ways, both because of how lifeways differ across these regions, and because of the particular histories that have shaped each of the communities represented here.

The history of colonialism has been experienced differently in South America than elsewhere, and differently still in the Andes versus the Amazon. In the Andes, it is impossible not to see the manifestation of the European conquest at every turn. In the Amazon, the present-day

manifestations of this conquest are still underway in the form of land encroachment, petroleum extraction, and wholesale environmental and religious conversion. Settler colonialism is present everywhere, and is entangled with attitudes towards knowledge as a contrast case (e.g., in how European-style schooling contrasts with Indigenous pedagogies) and a locus of resistance (Castellanos 2017).

And yet the demographic majority status of Indigenous communities in some parts of this geographic region mean that Indigenous identity and political power loom large, positioning Indigenous knowledge and perspectives quite differently than in some other parts of the world. For example, there are millions of Quechua speakers throughout the Andean countries stretching from Colombia to Chile, including approximately one-quarter of the population in Peru, where it is one of the official national languages.⁶ This makes dialogues about Indigenous approaches to knowledge quite public and widely circulated in South America, compared to some other places in the colonial world, such as the United States. This difference can be seen in Andean countries such as Ecuador and Peru, where the role that Indigenous pedagogy should play in schools is publicly debated at provincial and national levels—a notable contrast from the United States (but similar to, for example, New Zealand; Vélez 2008).

Indigenous political power in South America also informs attitudes towards Indigenous knowledge that make this an important place and time in history for the study of Indigenous worldviews, how they circulate and are conceptualized (de la Cadena 2010). Indigenous communities have always been a potent political force in many parts of South America, but since the election of Evo Morales as president of Bolivia in 2006, Indigenous political power has surged to the forefront like never before (Postero 2007). Indigenous candidates now regularly run for, and often win, offices at national and provincial levels throughout South America. This creates amplified possibilities for the structural realization of Indigenous approaches to knowledge, as in the form of state-sponsored educational initiatives and the legalization of Indigenous languages as national and/or official languages. It also opens spaces for new forms of pan-Indigenous identity, cooperation, and dialogue, leading to increasing awareness of shared Indigenous perspectives and respect for

6. As of the 2017 census: <https://censo2017.inei.gob.pe/resultados-definitivos-de-los-censos-nacionales-2017/>.

cultural differences by Indigenous and (some) non-Indigenous people alike.

These examples reflect just some of the ways in which Indigenous approaches to knowledge in the context of this region at this moment in history are of particular interest and importance. The chapters in this volume examine Indigenous epistemologies from multiple, intersecting angles, and the reader will find a host of themes interwoven through these pieces. Here I will highlight just a few.

Epistemology and Ontology

Questions of ontology and epistemology are deeply entangled, and this entanglement is apparent throughout these chapters. What is knowledge? What kind of “thing” is it, if it is indeed a “thing”? Where is it located? Who has it? What are the conditions needed to get it? Via what means does it circulate?

As Arahuate et al.⁷ emphasize, there is a diversity of views on this matter across Indigenous communities, and different conceptions of what knowledge is. That said, it is possible to identify some common themes in the ontologies of knowledge described here. In her chapter on Uitoto plant knowledge, McLachlan points to features of Uitoto ontology of knowledge that are widely shared across the communities represented in this book. These include knowledge as *action*, or knowing how; knowledge as *embodied*, inseparable from the bodies of knowers; knowledge as *substantial*, made of physical stuff; knowledge as *relational*, or social; knowledge as *situated*, or tied to place; knowledge as *identity* and *power*; and knowledge as *dynamic*—not static representations frozen in time, but living, relational materiality in need of constant maintenance.

Nearly every chapter in the volume emphasizes an inseparable relationship between knowledge and action. Some argue that knowledge and action are essentially identical, as in Cepek and Lucitante’s comparison of Cofán and Marxist epistemologies, in which the truth is proved and even created through action. Others point to the practical or skill-based nature of knowledge—Ryle’s “knowing how”—as in the

7. In the following discussion of the volume’s contents, I will use authors’ names to refer to chapters in this volume, leaving aside the citation “this volume” (e.g., “Arahuate et al., this volume” will simply appear as “Arahuate et al.”).

Quechua notion of *yachay* (Andrade Ciudad 2023; Mazzi-Huaycucho 2023; Mujica and Córdova 2023; Quintanilla 2023; Ryle 1945; see also Cepek & Lucitante; Fleck; Silenzi). There is also the idea of knowledge as a prerequisite or necessary condition for action: the one who knows does (Arahuate et al.). And there is knowledge as power: the power of Indigenous communities that lies in their collective knowledge, and the power to effect physical, worldly change that stems from embodied knowledge, as seen in Cofán *davu* (power objects transmitted bodily from shaman to apprentice; Cepek & Lucitante), Shuar *anent* (songs with powers to change worldly outcomes; Barrett), and the kin-making powers of Uitto plant knowledge (McLachlan).

Closely related to the notion of knowledge as action is the physical, embodied, situated nature of knowledge, which stands in contract to dualist European views of knowledge as “abstract” information that can be removed from bodies and from contexts of space, time, and community, and that can be stored, unaltered and unchanging, across time. Indeed, the chapters in this volume show that nearly none of this abstract, disembodied, depersonalized notion of knowledge makes sense in the communities represented here.

The embodied nature of knowledge in these communities has many facets that challenge dualist notions of knowledge. In one form of dualism, the mind and its knowledge are nonphysical, or at least can be: they either are not located in the body, or can be separated from it (as is held to be the case in some accounts of afterlife beliefs [Barrett et al. 2021]). In another form of dualism, the mind and body are not equal, or coextensive, in that the mind is located in one part of the body (e.g., the brain or the heart). In his chapter on Matses body part prefixation, Fleck argues that neither form of dualism holds in Matses, because there is no conception of “mind” separate from the body (and, according to Fleck, no word for “mind” at all). There are words for knowledge and for learning, but each of these phenomena occurs at the body part where the knowledge and learning are manifest, such as the foot when walking or the mouth when talking. The Matses nature of knowledge, then, is fully embodied: there is no separation between the place where knowledge is “stored” and where it is “deployed,” as there is in some European views of the mind as the controller of the body and its parts.⁸ This resonates with

8. On their 1988 album *Surfer Rosa*, the band Pixies asked, “Where is my mind?” In Matses, it seems, this question could be neither asked nor answered.

Indigenous conceptualizations of knowledge such as the Quechua notion of *yachay* (Andrade Ciudad 2023; Mazzi-Huaycucho 2023; Mujica and Córdoba 2023).

Knowledge as Substance

Not only is knowledge embodied in the sense described above—residing in and manifested by the body itself—it is also, in many of the communities discussed here, a physical substance that is transmitted from individual to individual and incorporated, literally, into their bodies. In her chapter on Uitoto plant knowledge, McLachlan evocatively captures the physical nature of plant knowledge as residing in physical plants themselves, such as coca, tobacco, and manioc, which are relatives to humans and holders of knowledge. But these plants are also beings that reproduce themselves (and, therefore, their knowledge) and are physically consumed, such that their bodies are incorporated into other bodies (and, therefore, also their knowledge). This incorporation, in turn, makes those bodies into kin. The notion of knowledge as a physically incorporated substance—transmitted through plant material, meat, milk, semen, and saliva—is widespread in the Amazon (Fabiano and Artzi 2023; Fausto 2007; Londoño Sulkin 2012; Vilaça 2005).

In their chapter on Cofán shamanic knowledge, Cepek and Lucitante provide a striking example of the physicality of knowledge in the case of *davu*, the power objects that must be acquired for an individual to become a shaman, and that are the source of his power.⁹ These objects must be acquired from another shaman (or indirectly from another shaman via a patient), and once inside the body, if properly cared for, they will begin to multiply. *Davu* are both knowledge, physically manifested, and the power to cure, physically manifested. As Cepek and Lucitante describe, *davu* can in some sense be physically separated from the shaman's body, but they are also in another sense never separated from it. They form a permanent connection between the shaman, his patient, and the *cocoya* beings who are ultimately the true owners of the *davu* and who inform the shaman how and when the *davu* can be used to cure. Here we see both the physical nature of knowledge, its embodiment, and its

9. As the authors note, “Cofán shamanism is an overwhelmingly male pursuit.”

inseparability from action—in this case, the power to cure, or to cause harm.

The substantial nature of knowledge as physical stuff is not only located in bodies, it is also what creates them, and binds them as kin (Fabiano and Artzi 2023; Fausto 2007; Londoño Sulkin 2012; Vilaça 2005). In Uitoto communities, women’s knowledge of plants, and women’s curation and preparation of the bodies of plants for consumption by others, plays a key role in both the creation and maintenance of bodies and of kinship (McLachlan). The special knowledge that Uitoto women have of, for example, how to neutralize the toxicity of plants is part of what gives them, according to McLachlan, their “kin-making powers.” And as one would expect, the incorporation of particular foods or substances is often accompanied by particular rituals or practices, such as fasting and abstention, in order to make the body ready to receive these substances and their knowledge (Cepek & Lucitante). Because knowledge is embodied, bodily discipline is required in order to receive it.

Knowledge as Situated

In Keith Basso’s (1996) formulation, wisdom “sits in places.” This is true in several senses that resonate with the embodied and relational nature of knowledge. First, people live in places, and are from them. For many of the communities described here, knowledge only makes sense in the context of where it is from and where it is deployed (Arahuate et al.). As Narayanan describes in her chapter on language and identity in Quechua and Aymara communities, one’s identity and the validity of one’s knowledge are linked to where one is from; the language one speaks is only now coming to play a larger role in identity differentiation. McLachlan details how being displaced from ancestral homelands creates potential crises of knowledge for Uitoto *desplazados*, because the local, geographically situated power of their knowledge is displaced as well. The situated nature of knowledge also stems from the identity and positionality of those who embody it (Haraway 1988). As Quintanilla points out, for Quechua speakers, there is no truth independent of the person saying it, which is reflected in the way evidential markers are deployed by Quechua people in their discourse.

In addition to this macro level of the situatedness of knowledge, there is a micro reading: knowledge is situated in and on the body. We have already seen a particularly vivid example of this in the case of Matses

body part prefixes that locate teaching and learning at specific places on the body (Fleck). Cepek and Lucitante also illustrate the complex ways in which shamanic knowledge is situated in and on the body, and describe unusual linguistic configurations in which particular kinds of knowledge and knowledge objects are described as being “at” the body and locations on it.

Knowledge as Relational

While many Western views of knowledge see it as socially transmitted and socially constructed, knowers are, ultimately, individuals. For many of the Indigenous communities represented here, in contrast, knowledge does not reside exclusively within individuals, nor can it be created or maintained in the absence of community (Moreton-Robinson 2017; Tynan 2021). As we have seen, for Uitto communities, knowledge is physically transmitted between individuals, both making their bodies and making them into kin (McLachlan). For Cofán shamans, the *davu* that constitute knowledge circulate between individuals and yet remain connected, creating a web of relationships (including with the *cocoya* beings who own the *davu*) that must be maintained in order for that knowledge to have power (Cepek & Lucitante). Indeed, Cepek and Lucitante describe a form of “distributed agency” that comes from the relational nature of *davu* knowledge power, and Cofán shamans do not describe themselves as acting alone, or as the sole authors of their healing powers. McLachlan, similarly, cites the “materialization of an extended kin body” as a condition necessary for the creation and deployment of knowledge in action.

The importance of relationships with other-than-human beings in circulating and maintaining knowledge is also seen in Siona dream narratives, where knowledge is obtained from interactions with beings in other worlds, and yet has validity in this world (Langdon). As described by Arahuate et al., knowledge comes through relations with people, nature, and natural beings. Knowledge is social, bigger than just the self, and requires more than the self. Understanding knowledge as relational is also necessary for a proper ethics of knowledge, and for living the good life. Emotional attunement towards others is a value often associated with deployment of knowledge and language, as it is for Quechua speakers (Silenzi). Indeed, living properly and ethically is also necessary for knowledge itself, and for its deployment: “To have certain knowledge,

you have to try to be a good person and above all leave behind pride and selfishness. Otherwise, we will never have good knowledge” (Arahuate et al.). This points to a relationship between individual virtue and knowledge, reminiscent of some virtue epistemology frameworks in philosophy (Turri, Alfano, and Greco 2021).

Knowledge grounded in relationships is a key part of identity, as Arahuate et al. point out. Indigenous knowledge differs from non-Indigenous settler knowledge: it embodies practical abilities and traditions linked to being “from here,” and is necessary to maintain Indigenous identity and power. As McLachlan describes, some forms of knowledge are also gendered, and embodied via gendered forms of kinship. Such kinds of knowledge are constitutive of identity, but also of gendered forms of power, such as the power to create kinship.

The Fragility of Knowledge

An aspect of knowledge seen in these chapters, and one that differs from knowledge as frequently conceptualized in the West, is its dynamic, unstable nature. This is not to say that Europeans do not see knowledge as changing, or changeable. It is to say that for many Indigenous communities, knowledge is a living thing that must be actively and continuously nurtured and maintained, or it will wither and die. On this view, what is stored as words or pictures in a book or a computer is not really “knowledge.” Knowledge is embodied in living communities as part of their flesh, and like all flesh, it cannot live, thrive, reproduce, or persist without being nurtured, maintained, and used in the right ways.

This perspective comes across vividly in McLachlan’s chapter on plant knowledge, and reflects views about the living, substantial nature of language described by Hauck. Cepek and Lucitante describe the continuous struggle necessary to maintain and nurture *davvu*, without which they will degenerate and cause harm. In my chapter, I evoke Debenport’s (2012) notion of “continuous perfectibility” to describe Shuar attitudes towards the curation and maintenance of knowledge power. *Anent* cannot simply be recorded and played back—they can, but would be powerless—and they do not have any power in the absence of the continued efforts of communities of practitioners to maintain knowledge and the conditions for its deployment. There is a parallel in certain forms of practical scientific knowledge, such as statistics. Ideals of continuous perfectibility are also seen in Urarina forms of pedagogy in which the imperfect

deployment of knowledge is explicitly recognized and used as a motivator to do better, as in the case of a father telling his child making an oar, “Just a bit more to do it perfectly” (Arahuate et al.). In some cases, community members recognize that legitimate forms of knowledge power will disappear without continuous maintenance and should perhaps be allowed to do so, as Arahuate et al. suggest for the Shuar practice of *tsantsa* (the ceremonial reduction of heads). Knowledge is dynamic, and its maintenance by a community is an intentional, effortful act.

Language

A final, major theme of this volume is language. As Laura Rival notes in her postface to the volume, it has long been recognized that there are deep relationships between language, culture, and knowledge—though what, exactly, these relationships are remains contested and debated. She describes a widespread, though deeply Western, view of humans as “body-plus’ organisms,” where culture is “added on” to nature. For many Western scholars, language is part of this “add-on,” a vehicle for transmitting knowledge from person to person, body to body, but not part of the body itself.¹⁰ Moreover, Western scientific ontologies have tended to see language as its own, separable object within the broader ontological category of knowledge. In Ryle’s (1945) formulation described above, language is the source of “propositions” that can be entertained by the intellect. A long tradition in anthropology and linguistics has examined how “language” and “thought” might be related, but frames them as potentially separable, independent things in the very way the question is formulated.

The chapters in this volume complicate such views. Four chapters at the volume’s center, by Narayanan, Fleck, Quintanilla, Silenzi, and Hauck, deal directly with questions of language. Narayanan examines the interplay between landscape, language, and identity in Quechua- and Aymara-speaking communities in Peru, showing how *languages*, plural, have become part of the social identities of people in these communities,

10. The view of language as embodied, I and others have argued, is also necessary to understand how evolutionary processes have shaped human language capacities. While older evolutionary approaches viewed language as separate from “biological” traits, language is and must be seen as part of the phenotype, along with every other embodied trait (Barrett 2015).

alongside more traditional, place-based notions of social identity. In these communities, linguistic praxis has long been seen as a form of embodied knowledge, but there has not, until recently, been a one-to-one correspondence between language and social identity. Narayanan analyzes the reasons for, and consequences of, this shift.

Silenzi analyzes the role of emotional experience in Andean language speakers who speak Spanish as a second language. In this analysis, she challenges “cognitivist” views of language which view language, as described above, as a particular kind of isolable representational object, upon which emotional expressions are merely “shadows.” Instead, she argues for a postcognitivist view in which emotional experience is an intrinsic part of language itself, embodied in the speaking of one’s native language and not easily transportable to other, second languages.

Fleck’s chapter, as described above, asks how linguistic forms in Matses represent how knowledge is taught and learned. The question here is not how words affect thought, as is typically asked in the literature on language and cognition literature. Instead, Fleck asks how conceptions of knowledge itself are reflected in the Matses language. Using linguistic analysis, Fleck shows that it is difficult to find any generalized notion of knowledge or “mind” in Matses talk about teaching and learning: all knowledge is embodied and local, occurring at the body part where it is taught, learned, or deployed.

Quintanilla asks how epistemic practices might be shaped by language, using the example of evidentiality in Quechua as a case study. Linguists have long been fascinated by the existence of evidential markers in languages such as Quechua, where different evidential markers indicate a speaker’s epistemic position with respect to the statements they are making: whether, for example, they are asserting something of which they have direct knowledge, or something that was told to them (Aikhenvald 2004; Martínez Vera 2023). Quintanilla suggests that the use of evidential markers by Quechua speakers shapes their “epistemic intuitions.” These include, for example, intuitions about epistemic responsibility. Because evidentials require Quechua speakers to specify their own epistemic stance towards what they are asserting (e.g., whether they personally endorse it or overheard it), Quintanilla argues that they are more finely attuned to certain kinds of epistemic responsibility entailed by acts of assertion. Here, the theme of ethical entailments of knowledge comes to the fore: if Quintanilla is right, Quechua linguistic praxis embodies ethical entailments—taking particular kinds of

responsibility for what one asserts—that might not be present for speakers of other languages.

Hauck focuses on a phenomenon that is not directly addressed in any of the other chapters: the ontological diversity of language itself. In reviewing a large body of literature on South American languages and language communities, he highlights that there are different understandings of language across these communities, raising the question of “*what language is* as conceptualized in Indigenous epistemologies.” As he points out, in many Western traditions, including academic ones, “language” is both a human universal (all humans have language/languages) and a trait that differentiates humans from other animals, who do not have language, at least not language in the human sense. Indeed, while evolutionists have debated the degree to which the communication systems of nonhuman animals, including other apes, might have *elements* of human language, such as referentiality, some aspects of human language, such as its combinatorics, are seen as categorically different from animal communication (Jackendoff 1999). In contrast, as Hauck reviews, for many Indigenous communities, language is not typically what differentiates humans from nonhumans. Moreover, views of what language is—and, indeed, whether language is seen as a “thing” at all—differ across linguistic communities. Following earlier work by Hauck and Heurich (2018), Hauck presents the concept of *linguistic natures*, and suggests that there is likely to be a diversity of linguistic natures around the world and within the communities surveyed here. Just as the ontology of knowledge is not something fixed or uniform across cultures and traditions, neither is the ontology of language. Hauck’s survey of Indigenous South American conceptions of linguistic natures shows how understanding these differences, including differences from typical European conceptions of language, is important for understanding Indigenous epistemologies—including the critical question of how different *kinds* of knowledge are circulated and embodied.

Conclusion

Here I have identified but a few of the threads that connect these chapters and the epistemological practices and values of the communities they describe. I imagine the other contributors and coeditors might have chosen to emphasize different issues, questions, common threads, and divergences. Nevertheless, I think it is safe to say that a shared goal of the authors in this collection is to place Indigenous epistemologies in

dialogue with their non-Indigenous kin. There are many reasons why such a dialogue can be useful. One is to show that certain ways of thinking about knowledge, including ways that have been dominant in academic fields including philosophy and cognitive science, are not the only ways of thinking about knowledge. Indeed, they might not even be the most common, wise, or even correct ways of thinking about it. We stand to learn much by decolonizing knowledge *of* knowledge.

We have tried to make clear that while there is no such thing as a single Indigenous worldview, Andean and Amazonian perspectives on knowledge, wisdom, and understanding have much to offer in building an “epistemology for the rest of the world” (Mizumoto, Stich, and McCready 2018). In this introduction, I have tried to highlight some of the common themes that emerge from these chapters, and to emphasize how these Indigenous perspectives on knowledge bring to the fore aspects of knowledge—and, indeed, many features of knowledge that are universal or nearly so—that are often neglected by or missing from epistemological approaches in philosophy, psychology, and anthropology.

As Cepek (2016) argues, a necessary part of intellectual humility is respect for the complexities and subtleties of knowledge, how it circulates, and the values associated with it, in addition to just the contents of knowledge itself. Colonial approaches to knowledge have been largely extractive, seeking to mine and plunder whatever is of value and to move on. We argue, on the contrary, that the flow of knowledge is not, nor should it be seen as, the flow of a resource. Some knowledge is private, local, sovereign, and should stay where it is. But expanding our understanding of what knowledge *is* can help us all, and, perhaps, the world. Privilege and its opposite come from placing some kinds of knowledge above others. But also, any community, scholarly, global, or local, only harms itself by failing to recognize real knowledge as knowledge, or to valorize it as such. For these reasons, all of us, including scientists, would do well to attend to the values and mechanisms of knowing embodied in Indigenous epistemologies. As William Carlos Williams insists, “Knowledge is essential, delightful, human.” We forget this at our peril.

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CHAPTER 2

Perceptions, Relations, and Possessions: The Expansive Body as the Foundation of Cofán Shamanic Epistemology

Michael L. Cepek and Cesario Lucitante

MLC [Michael L. Cepek]: How many nights must you drink *yaje*¹ to see the *yaje* people?

CL [Cesario Lucitante]: You'll suffer for three nights. On the fourth, you'll really fight, but you still won't learn to see. When you drink on the fifth night, you'll start to hear. Just that. You'll hear the *yaje ccusi'pa* [drunkenness] and the *yaje* painting, and you'll wake up. But you still won't really see. Not yet. Then, you drink the next night, and you'll fight really, really, hard. In the middle of the night, you'll wake up, and then day will come. Then, the server [i.e., the shaman] will say, "Now, boil some more *yaje*, and drink more!" And you'll drink again. At that point, you'll start to see. You'll learn how shamans become inebriated and see. And then day will come,

1. *Yaje* is the word Cofán people use for the hallucinogenic brew composed of the liana *Banisteriopsis caapi* boiled with various plant additives. It is known more commonly in Amazonia and around the world as yagé or ayahuasca.

and you'll think, "Is that what it's like?" But only if you drink without fear. If you become scared, you'll give up for good. People get scared, their bodies get scared. Their bodies shake. Their hearts run fast. *Yaje* punishes you.

MLC: Is that how it is?

CL: Yes. If you aren't afraid, you'll drink again the next night. You don't just suffer a little, you suffer a lot! [Laughs.] That's how you learn. But if you're drinking *yaje*, you can't just consume things like you did before. You can't drink purchased beer or manioc beer a person has mashed and mixed with their hands. That's prohibited. It's bad. One must taboo many things if one is drinking *yaje*. If you don't do that, *yaje's ccusi'pa* won't inebriate you well. Your body will be cut.

I² recorded the above conversation in 2019. Even after I had been working with the Indigenous Cofán Nation of Amazonian Ecuador for nearly three decades, it was extremely difficult to translate. It was spoken in A'ingae, the Cofán language, an isolate that linguists have yet to fully describe. With a missionary vocabulary, a few pages of grammatical notes, and six months of immersion in 2001, I began doing all my fieldwork in the language. Despite the complexities of the original A'ingae text, I imagine the translation successfully conveys the hardship of achieving shamanic sight by consuming *yaje*. Yet so many of the English terms have senses that capture only part of their A'ingae correlates—or appear entirely unrelated: “people” comes from *a'i* (Cofán person, human person, “supernatural” person); “night” comes from *tsa'o* (house); “learn” comes from *atesuye* (“to learn” as well as “to know”); and “server” comes from *cuiñan'su* (one who makes others drink). Other terms are clear translations but in strange contexts (e.g., how can one “hear” drunkenness and painting?). Finally, some of the most important words, such as “see” and “body,” require extensive explication.

In this chapter, I grapple with the question of what “Cofán shamanic epistemology” is. In other words, I try to explain the Cofán theory of shamanic knowledge, including its modes of acquisition and enactment. My preliminary answer—that Cofán shamanic knowledge is an embodied capacity to act that involves visual perception, spoken testimony, and the incorporation and deployment of a set of objects and beings—is just

2. Cepek wrote the chapter, but Lucitante provided most of the ethnographic material and A'ingae text.

as complicated as it sounds. In relation to Western academic epistemologies, Cofán shamanic knowledge is a matter of “knowing how” rather than “knowing that,” to use Gilbert Ryle’s distinction ([1949] 2000). It also shares the basic assumptions of Marxist epistemology. As stated in the *Theses on Feuerbach*, people must prove the “truth,” or the “reality and power,” of their thinking through practice (Marx [1845] 1978: 144). In Antonio Gramsci’s terms, an understanding of the world is only “true” if it becomes a new reality” ([1929–35] 1971: 178). In some senses, Cofán shamanism does involve “justified true belief,” a central concept in contemporary philosophical epistemology. The fundamental nature of Cofán shamanic knowledge, though, is the capacity for efficacious action. For Cofán shamans, “knowing” and “acting,” or at least having the potential to act, are equivalent. Accordingly, to know is to be capable of various kinds and levels of action, the main types of which are curing, defending, and killing,³ all of which involve complex steps, preconditions, and relations with each other.

Cesario Lucitante, an accomplished shaman, is my main teacher in my current project. I have yet to finish fieldwork, but Cesario has provided more than enough data to write this chapter. Still, as Cesario would say about a shamanic neophyte, as a scholar of the topic I am a *nanimbi’choa* (one who is not complete). Often with the aid of his son Octavio, himself a “small” shaman with a decidedly intellectual bent, Cesario is trying to help me understand his practice. He heals and defends his people in the community of Duvuno, which is increasingly troubled by the violence—mainly shamanic, but sometimes physical—brought by Indigenous Kichwa⁴ colonists who began displacing Cofán residents in the late 1960s. Cesario serves me *yaje* and treats my ailments,

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3. In previous generations, the “calling” or “making” of game animals for people to hunt was also a central shamanic action. To the best of my knowledge, Cofán shamans no longer possess the skill, though some do perform actions that make it easier for individuals to hunt certain species.
 4. There are a number of excellent ethnographies of Amazonian Ecuador’s Kichwa-speaking peoples (e.g., Erazo 2013; Kohn 2013; Muratorio 1991; Uzendoski 2010; Whitten 2007). In the Andean highlands, “Quechua” is the accepted word for the language spoken by a variety of Andean Indigenous peoples. In the Amazonian lowlands, distinct Indigenous peoples who speak a dialect of Quechua refer to themselves and their language as “Kichwa.”

which has allowed him to place invisible feathers into/onto⁵ my head. They help assure my health. If I had shamanic ambitions, such feathers and others like them would allow me to do many things.

Cofán shamanic knowledge is largely a matter of direct, primary experience. Some of the most powerful shamans I know would find it hard, and perhaps impossible, to articulate their knowledge in language. The statement holds true even when speaking A'ingae to an anthropologist they trust who, miraculously, sometimes asks sensible questions. Just as importantly, Cofán shamanic knowledge is personal. Beginning in 2001, I have recorded hundreds of hours of interviews with shamanically knowledgeable individuals. Their descriptions and explanations departed from each other in significant ways. Cesario has given me the most complete, detailed account I have. He is also the most powerful shaman with whom I have worked. Octavio, who takes his own notes while we do research, is key to the productivity of my conversations with Cesario. He triangulates between us by helping his father realize what I am trying to ask and understand. Yet Cesario is the first to admit he does not know everything. "*Toya shacangi*," he says—"I'm still lacking."

The complexities of researching Cofán shamanism partially explained my suggestion to Cesario that he be the coauthor of my future book and other works on the topic.⁶ He agreed. The book will offer key insights into the broad patterns of Cofán and other Amazonian peoples' shamanic practices. Yet it will focus on Cesario's specific depictions, which are based on his immediate experiences, his conversations with other shamans, and his personal interpretations and speculations. In keeping with Cesario's centrality, I will include as many of his direct quotations as possible, not only in the book but in all works that emerge from the project. Octavio's words supplement his father's, but Cesario is clearly the authority.

I will begin my account of Cofán shamanic epistemology with a discussion of the various terms for Cofán shamans as well as the importance of visual perception and spoken testimony in the conceptualization of their knowledge. Then, I will describe the processes of shamanic

5. In Cofán shamanic thought, there is no clear distinction between being in, on, or outside one's body, as I discuss below.

6. The only book currently published on Cofán shamanism is Scott Robinson's *Hacia una comprensión de shamanismo cofán* (1996). Though I am friends with Robinson and admire his work, our interpretations of Cofán shamanism differ substantially.

learning and the ways shamanic knowledge is enacted. I will conclude with a somewhat speculative treatment of the most complex conceptual aspects of Cofán shamanic knowledge: the shaman's embodiment of objects and beings and the expansion of his⁷ agency across a wide web of relations and actors.

Shamans, Seeing, and Hearing

The word *shamán*, which derives from a Tungusic language of Siberia (Langdon 1992: 3), is now fairly common in Ecuador. An even more common word, especially for *mestizo* nationals and New Age shamanic tourists, is *taita*, which means “father” in Kichwa. Cesario rarely utters either term. He does, however, make great use of *curaga*, which is a borrowing of the Kichwa *kuraka*, which referred to Indigenous Andean leaders who negotiated relations with colonial officials and deities (Szemiński 1987: 183). In A'ingae, the most common terms for a shaman derive from the verb *atesuye*: *atesu'cho* (one who has learned), *atesu a'i* (a knowing person), or simply *atesu* (knower). Among Cofán shamans themselves, equally common terms derive from the verb *átteye* (to see): *áttepa a'i* (seeing person), *áttepa canse'cho a'i* (one whose seeing is central to their life), and *cocoma áttepa canse'cho a'i* (one whose seeing of *coco* is central to their life).

According to Cesario, *coco* and *cocoya* are equivalent words. I usually translate them as “malevolent supernatural agent.” Cofán people typically render them in Spanish as *demonio* (demon). A key characteristic of *coco/cocoya*, however, is that though shamans can see them, nonshamans cannot. Their unavailability to everyday perception is why individuals such as Cesario call flesh-and-blood humans most people cannot see—the Headwaters People, the Forest People, and the Ukavati People—*cococoya*. Such peoples are invisible but not malevolent, though they dislike human contact. According to most accounts, they are the descendants of Cofán groups who fled into remote areas as the majority of Cofán territory was transformed by the Spanish conquest and more recent forms

7. Though many Cofán women have ingested or do ingest *yaje*, and though there was one Cofán woman shaman who died recently as well as another who appears in myths and legends, Cofán shamanism is an overwhelmingly male pursuit. Accordingly, I use male pronouns for Cofán shamans in this chapter.

of settler-colonialism. Shamans, however, are experts at establishing relations with the *attiambi a'i* (people who prevent others from seeing). Some learn special skills from the invisible peoples' shamans; others have wives and children with them.

The malevolence of "supernatural" *cocoya* is a central characteristic of many shamans. As demons, the beings are known for their violent ways, including killing. As I will describe below, Cofán shamans, too, are either actively violent or capable of being so. Accordingly, some people call shamans *cocoya*, *fittipa* (killer), or *ttesi* (jaguar). Many of Cesario's statements reflect the close association between *cocoya*, violence, seeing, and shamanism: "*Cocove in'jamba canse'cho te qui tsa yajei'ccu iyiccopa átteya'ya*" (It is said that one who thinks and desires as *cocoya* will struggle with *yaje* and see), or "*Maja dyo'jombi'ja curagave dapa a'ima fitti'je'cho*" (A fearless person will become a shaman and killer of people). But people might call a single shaman a *cocoya* and a *se'je'su* (curer). The former does not preclude the latter; abilities to kill and cure overlap. Shamans kill with and as *cocoya*, and they cure the same way. Invisible shamanic weapons, which aggressors send into people to kill them, are also key to labels for a shaman: *davu'pa* (a possessor of *davu*, the glass- or rock-like projectiles associated with Cofán shamanism) or *seje'cco'pa* (a possessor of *seje'cco*, the dart-like projectiles associated with Kichwa shamanism). When I asked Cesario whether all Cofán shamans have *davu*, he replied, "*Ñoa'me atesu'cho a'i'ta tsu a'mbian'fa*" (All truly knowledgeable shamans have them). With their knowledge, their sight, and their capacity for violence and curing, shamans are also *na'su*, a multivalent term that means "master," "owner," or "chief," which alludes to the fact that shamans were often political leaders of Cofán communities through the 1960s.

An antonym for "shaman" is *opa a'i*. An *opa* person values peace, reciprocity, satiation, and a life free from anxious preoccupation. As I have argued elsewhere (Cepek 2008), both the shaman and the *opa a'i* prize fearlessness, but they do so in inverse ways. The latter's desired form of fearlessness requires living in a state where one is blissfully distant from and ignorant of enemies. Shamanic fearlessness is the bold desire to identify, encounter, attack, and kill enemies. Consequently, a shaman seeks to "see," whereas an *opa a'i* would prefer not to. As Cesario explained, "*Ma'caen opa átteya?*" (How would an *opa* person see?). In Cofán shamanism, lack of sight is equal to lack of knowledge. If an *opa* person decides they want to see, a shaman must teach them: "*Atesundeccu atesian'fa opandecunga*" (Shamans are the ones who teach *opa* people), Cesario told me. The drive to see and learn is also about the willingness, or desire, to

engage and destroy enemies. In Cesario's words, "*Nane, atesũcho a'i tsu fi'ttipa canse'fa. Tsoin'da ñoa'me opa a'i'ta tsu fi'ttipa canse'fambi*" (A shaman is a killer. But if one is truly an *opa* person, they don't kill anyone).

As an adjective, *injansu* (suspicious) is the opposite of *opa*. An *injansu* person, such as a shaman, is constantly watching. They see enemy shamans coming to attack them in the guise of a *cocoya*; they observe from afar as shamans prepare and drink *yaje* to see what they are planning; and they see the results of attacks in people's bodies as the presence of a projectile or the absence of a *canse'pa* (life-force). As such, seeing is definitive of shamanic knowledge and action. Shamans use the word *a'tatssi* (clear as day) to describe an especially good *ccusi'pa* (drunkenness). When talking about *cocoya*, shamans dwell on their visible qualities: the brilliant, iridescent, and reflective shine of their faces, clothing, and houses, which themselves are filled with bright feathers and sight-amplifying mirrors. Cofán people paint their faces with the same designs they see on the visages of the *a'i* and *cocoya* they encounter in *ccusi'pa*.

The A'ingae term for *yaje* and other hallucinogens is *attianque'su* (that which makes one see). Hallucinogens will *canjañe* (show) people things. The entirety of a shaman's abilities, instruments, and allied beings are their *áttepa canse'cho* (what they see and live), the closest correlate for a single A'ingae phrase that means "shamanism." The shamanic practices of other peoples are their own *áttepa canse'cho*. Seeing is the initial action in healing. Octavio told me that when his father drinks *yaje* and looks into the body of a sick person, it is as if he is seeing an X-ray. The projectiles embedded in the patient appear as fireflies: shining, glowing objects. If a person's life-force has been captured by a *cocoya* under the command of an enemy shaman, the curing shaman must see that *cocoya* to retrieve the life-force and return it to the patient's body, effecting the cure. The life-force itself appears as a bird cradled in the arms of the attacking *cocoya*. In summary, curing demands profound, complex ways of seeing. "*Attembi'ta se'jeyambi qui,*" Cesario concluded—"If you can't see, you will not cure."

A shaman does not see with his given, naked eyes. His expanded vision rests on a complicated architecture, most of which is inside his body. The blurriness between the ideas of being "in," "on," or "outside" one's body is key to Cofán shamanism. While reviewing video recordings of shamanic healing sessions with Cesario and Octavio in 2021, I asked Cesario to draw a picture of how he sees himself and other shamans while drinking *yaje*. He laughed and said he could not do it. Octavio smiled and said the same thing. Consequently, I tried it myself. I drew a

stick-figure-like image of Cesario in the landscape *ccusi'pa*, with all the features it contains. He was fully ornamented in his finery: a beautiful crown of colorful feathers, face painted with dots and lines, macaw plumes through his ears and nose, piles of bright beads hanging around his neck, a shining tunic covering his body, and *matiri'cho* (blowgun-dart containers) under each arm. I even filled his hands and torso with the projectiles he said are in his body. But he pointed to the figure's eyes and told me to draw *davu* inside them, too. They are like glasses, he said. Only with an object in/on you can you see it in/on the body of a patient or other shaman. In Cesario's words, "*Me'cho ai'vo me'tssia'ta ma'caen qui atteya?*" (If there is nothing in your body, how will you see?). It is the *davu* inside Cesario that allow him to see the *davu* in a sick person. Similarly, if he does not have the clothing or ornaments of a specific *cocoya* in/on him, he cannot see that *cocoya's* human-like face to engage it in the aggressive dialogue that will make it stop its attack or relinquish a sick person's life-force.

As indicated in the passage that began this chapter, seeing is not entirely separate from hearing.⁸ At the very least, the modes of perception intertwine as a shaman accumulates and enacts his knowledge. When telling me what he does with his *coco patu* (*coco* stone), which is both inside and outside his body—outside, as I or any other *opa a'i* can see and touch it, it is a thick, round piece of glass—Cesario said "*tsa patui'ccu cambia*" (with that stone I look) at a patient's body. But the "stone" is more than an inert object; it is also a *cocoya*, Cesario revealed, and it "tells" him what is in the patient as he rubs it on their skin.

The immediate perceptual act of *pañañe* ("to hear" but also "to understand" or "to obey") is itself important to shamanic knowledge. A shaman learns to chant by mimicking the chants of the beings he sees and hears in *ccusi'pa*. When he hears chanting or *fendo'cho* (sound made with a flute) in the forest, he knows an enemy *cocoya* is approaching to attack him or his friends and relatives. But for shamanic knowledge, the most important form of hearing involves listening to the spoken testimonies of one's allied beings: the *cocoya* and *a'i* a shaman has seen and formed relations with while drinking *yaje* or other hallucinogens.

8. As students of ayahuasca and other hallucinogens within and beyond Amazonia know, reports of synesthesia, or the "confusion" of senses (e.g., tasting a color), are common while a person is under the influence of entheogens (Beyer 2010: 233–34).

When sharing the report of another person, Cofán people use the A'ingae particle *-te* to identify the information as something gathered or presented by someone other than the speaker. Consequently, it is indirect and potentially unreliable. When he shares what his *cocoya* or *a'i* tell him, Cesario never uses the reportative particle. The testimonies of his allied beings, which typically contain accounts of what they have seen, come from sources that are at least partially connected to him. A *cocoya's* vision, in other words, is the shaman's own at one level of remove. The *cocoya's* speech bridges the gap.

In previous work based on research with other Cofán shamans (Cepek 2018), I drew a careful distinction between *cocoya*, or “demons,” and *a'i*, or “supernatural people.” The former are generally violent, I wrote, whereas the latter are more peaceful and cooperative. Cesario makes no such distinction. He told me that the *yaje* people, a broad class of beings who are the first *a'i* a neophyte shaman sees, are themselves *cocoya*. They, too, get angry and kill, Cesario said. As described above, Cesario speaks of *coco a'i* (demon people), thereby including both beings in the same ontological class. The *yaje a'i* do appear immediately as beautifully adorned Cofán people, whereas *cocoya* look like terrifying creatures or objects. But once a shaman has learned to *di'shaye* (transform) into a *cocoya* by putting on its clothing and ornaments, he can see it as a human with its own distinct face paint, tunic, and headdress.

In *ccusi'pa*, a dream, or simply while walking in the forest, a shaman's allied *cocoya* tell him many things. They speak in *coco aya'fa* (*coco* language). It is the same form of speech in which a shaman *settaye* (chants) to the *a'i* and *cocoya* he sees while drinking *yaje*, curing, and “fixing” *yaje* to inebriate drinkers in specific ways. Though nonshamans can hear the chanting, only shamans can understand it. Cesario assured me that though the chanted words are indecipherable to *opa a'i*, they are definitely A'ingae.

The *cocoya* report many types of information. Outside of curing events, they reveal several things: their names or identities; whether the *yaje* a shaman intends to drink has been damaged or is still good; that someone is coming to kill the shaman; that another shaman or one of the shaman's family members has died; when the shaman himself or one of his relatives will die; whether a shaman should serve certain weapons to a person, a decision based on the *cocoya's* visual inspection of the aspirant, which reveals whether his body is “good” or “bad” and thus whether he intends to cure or only to kill; and, if the shaman has traveled to a *cocoya's* house in *ccusi'pa* or a dream, the *cocoya* will tell the shaman what he can do if he puts on the various ornaments or clothing hanging on the walls.

During shamanic healing events, a shaman's *cocoya* and *a'i* will gather around him in the *yaje* house—a simple structure set off from the village center where almost all *yaje* drinking and curing occur—inspect the patient, and tell a shaman what has happened to them. First, they reveal whether the patient can be cured or is already *fi'tti'cho* (killed), and thus beyond saving. If the former is the case, the shaman becomes energetic and happy, knowing his interventions can succeed. Second, the *cocoya* tell a shaman their diagnosis: what kind of projectile an enemy shaman has lodged in the patient's body or whether a different *cocoya* has captured the patient's life-force. Third, a shaman's *cocoya* actively guide him through the curing process. Typically, they see, point to, and describe the *da'non'cho* (damage) in the patient's body and suggest how the shaman can remove it. They also tell him what objects he should *antteye* (leave in) the patient, such as the feathers Cesario left in me, which return the patient to health and strength.

To the horror or delight of Western Christians, even Chiga—the A'ingae term for the sun and moon but also for “God”—can act as a *cocoya* to help the shaman cure. When I asked Cesario whether Chiga can heal people, he said Chiga is known to help shamans who seek his aid while drinking *yaje*:

People say Chiga cures people. A shaman ascends to the land of Chiga. And he approaches Chiga the Father, the *na'su* [master or owner]. He says to him, “This person is in the process of dying, and I'm worried about them. How can I save them?” Chiga replies, “That feather over there, cure that person by putting it on their head, on their crown.” So the shaman grabs the feather from the place where all of Chiga's *a'i* are gathered, and he puts it on the sick person's [invisible] crown. Chiga says, “You've now cured them. But tomorrow, they'll remain the same. And the next day they'll remain the same. But then you'll see that they won't die.” That's what Chiga tells you.

The other information *cocoya* report to a shaman during a healing event is the identity of the shaman who sent a projectile into the patient's body. Cesario said that each *davu* or *seje'cco* (dart) bears its sender's *número* (number, in Spanish). Octavio corrected his father, saying the objects actually display the sender's initials. Consequently, any *davu* Cesario sends would be labeled “CL.” Even while drinking *yaje*, many older shamans, including Cesario, cannot read. But the shaman's *cocoya* point to the initials, speak them to the shaman, and verbally identify the attacker.

Similar to his sight, a shaman's hearing develops through a set of interventions. To converse with and command a *cocoya*, a shaman must first see it, engage it, and learn its speech. Shamanic teachers enable people to see, meet, and speak with different *cocoya* by "serving" the *cocoya* to the student in specially *ñoñan'cho* (fixed), *agattoen'cho* (created), or *se'je'cho* (cured) *yaje*. The *cocoya* itself is not in the *yaje*; it is in the *ccusi'pa* a shaman creates for the student by serving him the altered brew. As Cesario described the *quini'jin coco* (tree *coco*) to me, he said, "With *yaje* a shaman can serve you the *a'i*, the *coco*, that live at the top of that tree. He'll serve you, and then you'll hear and understand them. Those *a'i* will say, 'Don't be afraid, drink more, and then you'll arrive to us.' That's how the shaman 'shows' the student." Once more, the deep link between seeing, hearing, and learning is evident. After having formed a bond with a *cocoya*, a shaman can use it in many ways.

Learning, Teaching, and Displaying

A shaman's ability to see and hear is created by other shamans, who transfer their knowledge to the learner as objects and beings. Cofán people often begin drinking *yaje* as children. Cesario told me he was eight when he started; in 2019, I saw a five-year-old drink at the suggestion of his father, who was drinking himself. There are only a couple of reasons Cofán people offer for their decision to try learning shamanism, though few succeed in becoming shamans. In previous generations, more adult men were shamans. All the children would gather to watch them perform miraculous feats in the *yaje* house. The atmosphere was jovial. The men smoked strong tobacco and constantly cracked jokes at each other, even while one or more of them were trying to cure a person who was close to death. I have a video from 2019 of perhaps the most powerful Ecuadorian Cofán shaman giggling so hard while rubbing and sucking a patient's head that he almost falls off his stool. Cesario told me that when he was a small child, he wanted to drink *yaje* and learn because it looked so fascinating. When considering Cofán shamanism, it is essential to remember that many, many people begin drinking at an incredibly young age, at least by Western standards. At that time, thoughts of curing or any other concrete actions are far from their minds.

Currently, the only acceptable reason for gaining substantial knowledge is so one can cure. A person does it out of compassion, people say. A severely criticized motivation is the desire to be able to kill but not

to cure. A shaman's *cocoya* will tell him not to give objects to people who have "bad bodies" because they would go on a killing spree if they acquired *davvu*, for example. Even shamans with well-known reputations for killing are not interested in such students. The students' violent intentions do not bother them, but they know such foolish, unskilled killers would only live for two or three days once they start attacking people. Other shamans would see and then kill them to stop them; teaching them would simply be a waste of time.

There are people who want to learn so they can acquire a shaman's reputation for strength and power, and thus their ability to gain renown and inspire fear. But that, too, is not a respectable motivation. Most shamans will eventually enjoy such reputations, but only later, after they have proven their ability to cure. Finally, with the growth of the shamanic tourism trade, which has saturated Colombian Cofán communities, some young men want to acquire extremely simple skills—non-Indigenous people are easy to fool and know little if anything about Cofán shamanism—so they can make money and attract non-Indigenous women. There are a number of such young, tourism-oriented Cofán "shamans" in Ecuador. Most people laugh at them: they do not really harm anyone, but they also know nothing.

Motivations to teach mirror motivations to learn. The most respected shamans, including Cesario, teach others out of compassion. They know they will die, perhaps sooner rather than later, and they want others to continue to cure and defend their people. For some shamans, especially Kichwa ones, the desire to teach can be economic. For serving a dart to a student, Cesario told me, a Kichwa shaman will ask as much as \$500. For extremely impoverished people—a category that includes the Cofán and the Kichwa—shamanism can bring substantial income. Indigenous people also pay accomplished Kichwa and Cofán shamans to cure them, at least if they are nonrelatives. According to Cesario, the prices Kichwa shamans demand are exorbitant. Cesario might only request \$10 or \$20, but he often cures people for free, especially if they have little or no money.

As described above, shamans teach others by preparing *yaje* such that aspirants will enter certain *ccusi'pa*, *yaje*'s "spaces" of drunkenness. With discipline and the fortitude to push past terrifying, incapacitating inebriation, which is characterized by screaming, crying, beating the ground, or loss of consciousness, a student can see and meet the *yaje* people in a matter of weeks. Then, over many years and sometimes an entire lifetime, they will seek shamanic weapons, ornaments, and clothing, the latter of which will allow them to transform into, converse with, act in the

shape of, and command not only *cocoya* but also jaguars, anacondas, and other animals. Teaching shamans serve learning ones the instruments they have *ppiñan* (put) in specially prepared *yaje*. Cofán people refer to this process as the *afeye* (giving), *andiañe* (adorning), *antteye* (leaving in/on), *ondiquiañe* (dressing), and *otifaeñe* (crowning) of special objects into/onto students' bodies. After a student has acquired such an object, he must obey a set of strict taboos for months. Otherwise, the newly incorporated instruments would become damaged, as would the bodies of the student, resulting in severe, possibly fatal sickness. One afternoon in 2019, Cesario and Octavio described the process to me:

MLC: How do you learn or acquire *davvu*?

CL: A shaman will serve it to you, and you will know it.

OL [Octavio Lucitante]: Let's say you want to learn. If you want to drink *davvu*, you have to taboo things and drink *yaje* for a long, long time. You do it for months. During that time, you can't damage your body. You can't eat any damaged or tabooed food. That period might last for two and a half months. Then, you'll finally learn. Slowly, over time, that *davvu* will begin to *somboyee* [emerge] throughout your body. At that point, you will know *davvu*.

MLC: But will a shaman put the *davvu* in the *yaje* gourd?

CL: Yes. They'll put it in there and then serve it to you.

MLC: But will you swallow the *davvu*?

CL: You won't feel it. It won't feel like you're drinking a stone or something! [Laughs.]

MLC: So where will that *davvu* go?

CL: It will go inside our body.

OL: It will go inside our body. That's how a shaman creates it in the *yaje* brew and serves it to you. That's how you learn. And you live like that for a long time. Then, you go to the *yaje* house. When you drink *yaje* then, it's like fireflies start entering your hands and arms. Then you will become filled with *davvu*, and you get close to knowing. You begin to see like that, and for two months you can't drink things the way you used to. You must watch yourself. But if you don't damage your body for two months, you will then know everything.

MLC: Will you see that *davvu* in a shaman's body?

CL: Yes. It's clear as day. That's how you see shamans who have *davvu*.

MLC: Will they look like stones to you?

CL: How can I explain it ... Here around your neck, there'll be necklaces of large glass beads. All the ornaments will have been placed into/onto you. Feathers will be in/on you. That's what there is, what one can see. And if you're somewhere else, a shaman will look at you and say to someone, "That *a'i* over there, the one who came here, he can really see."

MLC: Will all the people drinking *yaje* see that? Or just shamans?

CL: Just shamans. Those whose drinking of *yaje* is central to their life. They are the ones who will see what you have.

For shamans, it is easy to see the knowledge of others: they just look in/at their bodies, and they will see everything the shaman knows—all they have, are, and can see and do. For nonshamans, the matter is not so simple; they must see the shaman in action. The most important display and proof of one's shamanic knowledge is curing. In a typical healing session, the patient sits or lies down in front of a shaman, having taken off their shirt and sometimes their pants or skirt, but never their underwear or bra. The shaman is above them, sitting sideways in his hammock or on a small wooden stool. Sometimes the patient reminds the shaman what is ailing them, but typically the shaman has already heard. The shaman begins by shaking a bundle of leaves, his *sangangan'si*, over the patient's body. Then, while rattling the leaves, he starts chanting. He is in the *ccusi'pa* he created by forming and drinking the *yaje*: he sees and speaks to his *a'i* and *cocoya*, who have gathered around him in the *yaje* house.

Then, the shaman begins blowing smoke on, rubbing, and sucking different parts of the patient's body, usually starting with their head. Typically, his cigar is in his left hand, and he uses his right to rub the patient. When Cesario releases his lips from the patient's skin, he makes a loud, extended popping sound. Then, he rubs the spot he sucked with his right hand, brings his palm to his mouth, and retches violently for a few seconds. The *davu* rattles against his teeth as if it were gravel in a shaken jar. Everyone present, whether they are a shaman or not, can hear the noise emanating from Cesario's mouth. (If it is a "sleight of hand," I have never been able to figure out how Cesario does it, even after inspecting many video recordings of the action.) He then raises his hand, extends it palm-up, blows away the damage extracted from the patient, and makes a quick series of controlled, tight spits onto the floor. He then takes another drag from his cigar and starts again.

After fifteen minutes or an hour or two hours, the shaman picks up his leaf bundle and begins shaking it over the patient's body while blowing onto it with deep, stylized puffs. The rhythm eventually slows, the shaman expels a few more breaths, and he then says, "It is done." Sometimes, he concludes by telling the patient not to eat specific foods for a week or two. Typically, the prohibited foods are game animals as well as tuna and sardines. Almost all food items dangerous to patients are *anjampa'pa* (things filled with blood). While sucking out the projectiles, the shaman has deposited restorative feathers, for example, in the patient's body. Just like a shaman tabooing foods after being served *davu*, the patient must taboo them, too, to fully incorporate the objects into their body. Blood, whether from animal flesh or human reproductive functions (i.e., menstruation or pregnancy), would destroy the objects in both learning shamans and recovering patients. Consequently, the broken objects would hurt the people in whom they are embedded by losing their health-restoring functions and causing new injuries.

To *opa a'i*, it will appear as if the curing shaman is acting alone with only his cigar and leaf bundle. In truth, Cesario and Octavio stressed, curing is always a collective act involving the shaman, his allied beings, and a set of invisible objects:

OL: To truly save the sick person, you have to leave all kinds of feathers in their body. So they'll recover. You'll give them everything, this feather, that feather.

MLC: And the shaman *andiane* [adorns them with] those?

OL: Yes, he hangs them on the patient and leaves them there.

MLC: From where does he get the feathers?

CL: His *a'i* will give them. His *yaje a'i*. You yourself can't do it! [Laughs.] Those people are the ones who really cure.

MLC: What will they give you?

CL: Your *a'i* will be gathered in the *yaje* house. They'll tell you, "That's what's happened to the sick person. Give them our feathers, put the feathers on their head like a crown." So you fix those feathers like you're making a crown, and you put that on the person's head. "Now that person won't die, with that they'll be saved and live." The *na'sundeccu* [masters or owners, i.e., the *yaje* people] will tell you that. And then, five days later, the patient will have recovered.

MLC: Are those really feathers?

CL: Yes, they're feathers.

- MLC: But if you don't drink *yaje*, can you see those feathers?
 CL: No.
 MLC: And the feathers will go inside your body, or on your [embodied] crown, or where?
 CL: Everything will be left in/on the patient. For a man, let's say, you create a necklace of jaguar teeth [with the feathers], and you leave that in/on him. So that he gets better, so he lives with strength. And after leaving those objects in/on him, you command him only to eat certain things, and to taboo other things. That's how it's done.

A powerful shaman knows how to do many things: to defend his community from attacking *cocoya*, to kill people, to fight other shamans, and to "call" or "make" game animals for people to hunt. In the *yaje* house, a shaman can remove projectiles from a person's body and adorn the patient with strength-giving ornaments. Onlookers marvel at the sound of *davu* in Cesario's mouth; some shamans even take the projectiles out of a sick person and, at the end of the cure, display them to others in "physical" form (e.g., as small bones, porcupine quills, stones, or glass shards, held in the shaman's hand). The most impressive way to make the world of *ccusi'pa* visible to people in the *yaje* house, however, is for the shaman to *di'shaye* (transform) into a *cocoya* or animal. With strange shouts, grunts, chants, and movements, he "becomes" a jaguar or tapir, right there in the house. He plays beautiful music with *fendo'cco* (flutes) his *cocoya* have given him, though no one else can see them. Sometimes, in the mornings, people find piles of broken nuts and seeds on the ground. They are the remains of what the shaman ate after he *di'sha* into a white-lipped-peccary during the night.

The greatest shamans of all—such as Gregorio'ye, Cesario's father-in-law—could *di'shaye* into "thunder," the powerful *cocoya* that is the master and creator of *davu*. In the shape of that *cocoya*, Gregorio'ye would "close" thunder, or lock it in a *cocoya* house, so it could not use lightning to burn and kill people. Multiple times, Cesario told me how he watched Gregorio'ye transform into and close thunder. His eyes gleamed as if he were still a child seeing the act for the first time:

- MLC: Didn't you tell me that Gregorio'ye knew how to close thunder?
 CL: Yes. After having boiled *yaje*, the young men would gather all sorts of dried wood, bamboo, everything. Gregorio'ye

would sit on a stool made of dry balsa that was decorated with drawings. They would place the wood all around him, completely encircling him. It would be on the dirt floor of the *yaje* house, piled up to his head. And we all thought that everything, even his stool, would burn up. Then, they set fire to the wood. The fire rose, past his beaded necklaces, over the top of his feather headdress. He was covered in fire. It was burning. Then, he would begin to chant, to chant to that fire.

MLC: How did he not get burned?

CL: He was becoming the *na'su*, the thunder *coco*. Truly, thunder.

MLC: And by doing that he closed thunder?

CL: Yes. He himself *di'sha* into the thunder *coco*. The fire was all over him. Slowly, it began to die down. Then, he began to “play” the fire as if it were a flute, making music with it! [Laughs.] As children, we just sat and watched, all of us. We didn't get up. We sat there, unmoving, staring until day came. Then we got up to go look. Everything was exactly the same! We thought his stool would be burned. But nothing. It had stayed the same, unchanged. And balsa? It burns so easily. But that didn't happen.

OL: Like my father said, all that dried bamboo that was set on fire, Gregorio'ye chanted to the fire and closed it up. My father saw that, how he chanted and closed thunder. All his feathers? They weren't burned at all. People say that Gregorio'ye was *titsseya tsandama* [more than thunder].

Embodiment and Distributed Agency in Cofán Shamanism

Di'shayé means more than temporary transformation into a *cocoya* or animal. It is also the word for a person's “completion” as a shaman. Similar to many shamans, Gregorio'ye had traveled to other villages to be served by other shamans, including non-Cofán ones. When he returned, he was complete: a *di'sha'cho*. Cesario said, “*Tse'ttinga tsu ñoa'me'ja atte'fa'cho'ya. Pa'cco, nane, me'iangá. Ñoa'me curagave'ja di'sha'fa. Tse tsu tsangave'ja antte'ye. Tsangae tsu titsse yajema cu'ya'chove jin'chombi*” (At that point, he was truly one who had seen. Everything, everything. He had truly *di'sha* into a shaman. So he stopped learning, as there was nothing left for him to learn with *yaje*).

A complete shaman has a complete shamanic body. When I asked Cesario what one powerful contemporary shaman could do, he replied,

“Attepa’ma in’jan’ninda ña quitsa ccasbe’yei’ccu’ta fue’ngatssiya ai’vo qquia’can tsu” (I saw him and thought, “His body is equal to my father-in-law’s [Gregorio’ye’s] body”). The two shamans had equivalent bodies, which meant they possessed equivalent knowledge. As Cesario had already told me, with *yaje* a shaman can see what another shaman has in/on his body, and thus his knowledge: his feathers, his necklaces, his strings of jaguar teeth, his tunics, and his *cocoya* “hats,” “shoes,” and “glasses.” Those are his *atesu’cho* (learned things) and his *a’mbian’cho* (possessed things). The objects are “inalienable possessions” (Weiner 1992)—almost. If they become damaged because a shaman has broken a taboo, for example, the shaman’s body will also be damaged. If another shaman does not cure him by removing the damaged object, the shaman will die. In other words, a shaman only removes embodied possessions if they are destroyed, and he only does so to avoid the fatal consequences of leaving them where they are. If the shaman takes care of his body, he will die with his possessions inside him. Then, he will *di’shaye* into and live eternally as the *cocoya* associated with the objects.

A shaman’s possessions are the signs, aspects, and instruments of what he knows and can do. They are consubstantial with his body; without them, he cannot see at all. Cesario put the matter in the simplest terms: *“Na’sundeccu cuiñamba te’ta andiamba antte’fa, tse qui nane átteya”* (After shamans have served you those feathers and left them inside you, then you can see). Additionally, not only are the objects inside the shaman, he is inside them. After he has incorporated the objects, the shaman wakes up while dreaming in the house of the *cocoya* that owns the adornments and instruments. (Giving such objects to others does not mean one no longer has them.) It is also the house in which the shaman resides after death. The house contains the objects, the *cocoya* to whom they also belong, and the shaman himself.

From my perspective, it makes sense to view the shaman’s *cocoya* house as a shamanic metabody: a body that encompasses the shaman’s physical body and all it contains. Cesario never explicitly told me his body is a house, but there were hints of the idea in his speech. One of them was the way he attached shifting suffixes to the word *ai’vo* (body). Sometimes he talked about his *a’i* or objects being *ai’vonga* (“in” his body), and sometimes he described them as being *ai’voni* (“at” his body). To a Westerner, the latter construction seems nonsensical: How could one’s embodied objects be “at their body” rather than “in their body”? Cesario’s description of his own *cocoya* house, where he resides while dreaming, can help answer the questions:

MLC: How can you take care of yourself so that other shamans don't kill you?

CL: My *davu a'i* will tell me that someone is coming to kill me. They watch over me like guards. Let's say some bad, foolish shaman, or the *cocoya* he's commanded, has come here. If you're a good person, a good shaman, you just stay in your house, watching. That's how you live. If someone wants to kill me, my *a'i*, my *davu* people, will already have told me, saying, "They're coming for you. That shaman wants to kill you." If you haven't done anything wrong, you will have already seen that shaman or *cocoya* before they arrive. You stand there waiting and watching. Without fear, you come down from your house, go to them, and say, "Why are you coming to me? I don't behave like you. I stay right over there, in my house." I say that, and then they say, "We've come to kill you." And then I say, "If that's the way it is, wait a bit. If you want us to try killing each other, you'll see what happens!" So you grab all your possessions from your house and put them on. After you've put them on you say, "If you try to kill me, you will not survive!" And then they get scared and leave.

MLC: How do your *a'i* tell you those shamans are coming? In a dream? After you've drunk *yaje*?

CL: Your body, you will dream and ... Let me try to explain it to you. It's not like they're somewhere else. You already know *davu*. And if you know that, you already have those *a'i* "at your body" (*ai'voni*). They're already there. At your house. Right here, in a big house. That house is almost one thousand meters. And in the middle of that house sits the *na'su*, the master or owner [i.e., Cesario]. *A'i* are gathered there. They're soldiers, like the ones who fight in *mestizo* land. They have gathered around you. Truly, a lot of *a'i* are gathered there. That's how they care for you so you don't get killed.

MLC: And they're always there? Day, afternoon, night? Always?

CL: Yes, always.

Just like his body, a shaman's *cocoya* house—or the shaman-as-*cocoya*'s house—is filled with his possessions. The initial and primary form of the objects is feathers, though the shaman can transform them into other adornments. Cesario told me his house is filled with all he "puts on," not only his ornaments and clothing but also the *coco* shotgun with which

he can fire his *davu*. But everything in there, he told me, is *davuyi* (only *davu*) and *te'tayi* (only feathers): “*Davu te'ta, majama'qque nane, te'ta tsu. Te'ta. Nōtssia te'ta, nane. Tise etti'qque tsesu etti, pa'cco te'tayi tsu ccutsu. Tsani andu'pa'ja sheque'fa. Tsa tsu davuyi. Te'ta, nane, te'ta*” (*Davu* feathers, everything else, it's feathers. Feathers. Beautiful feathers. Your house, too, it's all just feathers. All the possessions you put on are gathered there. That's all just *davu*. Feathers, truly, feathers). It appears difficult or impossible for Cesario to distinguish feathers from *davu* or anything else in the house.

Each thing in a shaman's house is also animate: human-like if not actually human. From another perspective, the objects are partially human—or part of a human. There is no clear ontological divide between *davu*, feathers, other possessions, *a'i*, *cocoya*, and the shaman's body and house. Cesario sometimes uses the word *a'i* to describe the contents of his body (e.g., his *ai'vo'su a'i* [people of his body] or *a'mbian'cho a'i* [possessed people]). In the long passage above, Cesario explicitly identifies *davu* as an *a'i* in the phrase “*davu a'i*.” He also refers to the projectiles as *davundeccu*, which I translate as “*davu* people” because A'ingae's plural suffix (*-ndeccu*) is only attached to human collectivities.

Cesario has told me that *davu* are *cocoya* and *fittipa* (killers). When they are sent into someone's body, they kill by drinking the person's blood. In a shaman's own flesh, his *davu* “reproduce.” Cesario said the single *davu* projectile a shaman serves to a student will grow into millions of them in the latter's flesh. “*Jin tsu pa'coni*,” he said—“They're ‘at’ all parts of his body.” With *davu*'s never-ending ability to reproduce, a shaman can shoot them at enemies without worrying about exhausting them. He can even supplement his supply by incorporating the *davu* he sucks out of a patient. If they have yet to drink the sick person's blood, the *davu* remain undamaged, and the shaman rubs them into his arms after extracting them. Cesario was clear, though, that after initially acquiring *davu*, a beginning shaman must quickly start to cure. If he keeps his *davu* for too long without healing others, his body will become “bad.” At that point, he will be left forever as a simple killer unable to achieve advanced shamanic knowledge.

At an even broader scale, the shaman acts in conjunction with the *ccusi'pa* he creates. Perhaps my most nonsensical questions involved “where” the *cocoya* and *yaje a'i* “live” or “where” the shaman “goes” after drinking *yaje*. Cesario kept telling me the location is not some other *ande* (land) or *mundo* (world, in Spanish). Rather, it is *yaje ccusi'pa* itself: “*Nane yaje ccusi'pama tsu ya'taen supa canse'fa'ya. Tsani tsu canse'faya tise'pa a'indeccu, yaje na'su, yaje a'i*” (We say it's *yaje ccusi'pa*. That's where the

shaman's *a'i* live, the master of *yaje*, the *yaje a'i*). A few spiritually minded, non-Indigenous *yaje* drinkers in the United States have suggested to me that it is offensive to speak of *yaje*—a “sacred medicine”—as something that “inebriates” or “gets people drunk.” One day while talking to Cesario, he simply said, “You know what it’s like when you drink a lot of beer? Like you’re somewhere else? It’s the same with *yaje*.” Cesario never identifies *yaje* as *seje’pa* (medicine). Nor does he use *el remedio* (the remedy, in Spanish) to refer to *yaje*; it, too, is a preferred term of non-Indigenous *yaje* drinkers.

Despite the idea of “drunkenness” as a space or location, for Cesario and almost all Cofán people, the beings in/at *ccusi’pa* are real. When an accomplished shaman forms the *yaje*, the *ccusi’pa* he serves with it will be full of powerful beings. “*Tsa re’ri’ritsse ccusi’pa’ja jiyambi tsu nane*,” Cesario said—“It won’t just be a little *ccusi’pa* that comes.” “*Pa’cco cocoya, tise yaje a’indeccu tsu ji’fa*” (All of the shaman’s *cocoya* and *yaje a’i* will come). Cesario speaks of *ccusi’pa* itself as an agent: not only will it inebriate people, it will *dyoñañe* (frighten), *castigoye* (punish), *canjaeñe* (show), *angaye* (carry), and *panshaeñe* (push forward) *yaje* drinkers. “*Cocoya’ja tsu yaje ccusi’pa*” (*Yaje ccusi’pa* is a *cocoya*), Cesario laughed.

Even though *ccusi’pa* is an agent, Cesario explained, it is also an instrument: “*Nane tsa ccusi’pai’ccu tsu fuitaya. Yaje ccusi’pai’ccu nane tsa a’i paji’choma cañe, tsu tse’ja yaje’ja ccusiansi qui cambia in’jañan. Ma’caen tsu jin’cho’choma*” (With *yaje ccusi’pa* you can help. With *yaje ccusi’pa* you can look at sick people. *Yaje* will inebriate you, and you’ll look and understand what’s happened, what’s there). It is the shaman himself who forms the *ccusi’pa*, or makes it into an agent with specific abilities to contain, reveal, and accomplish certain objects, beings, and actions. But as with so many shamanic actions, the act of fixing, forming, or curing the *yaje*—perhaps the shaman’s most intentional, agentive action regarding *yaje*’s preparation and serving—is performed by the shaman as a collective being, not as a self-contained monad:

MLC: How do shamans fix the *yaje* before giving it to others to drink? Do they chant into it, or blow into it?

CL: Yes, they do that, but only after they have begun to drink themselves. After they drink, they begin serving others.

MLC: So how do they fix the *yaje*?

CL: They become *cocoya* and cure the *yaje*. They do that to the whole pot of *yaje*. So *yaje a’i* come in a certain way, so shamans can serve *ccusi’pa* to drinkers in a certain form. That’s

how they cure the *yaje*. They do that to the *yaje* itself. The owners or masters [i.e., *yaje a'i* and *cocoya*] will come and cure it. The shaman calls them, and they're the ones who come to cure the *yaje*. By curing it, people will drink without fear, and they'll drink a lot. It will inebriate them well.

The *ccusi'pa* acts as a medium that encompasses and penetrates the shaman, extends his body, and comingles him with other beings. The tabooed actions associated with preparing and drinking *yaje* are intended to avoid *cha'ttuye* (cutting) the *i'qui* (path on which one brings things) or *ji'qui* (path on which things come). The *yaje a'i* and *cocoya* arrive at the *yaje* house using such paths. In addition, breaking a taboo can cut the *yaje* itself as well as a drinker's *andu'si* (long, string-like ornaments that trail behind shamans). If the *cocoya* or *yaje a'i* see that a path has been cut, they will yell at the shaman for leading them to a damaged space. The *yaje a'i* only drink *yaje*—they do not consume anything else—so when they see that the prepared *yaje* has been cut and damaged, they become enraged. They sometimes retaliate by attacking and even killing the person who broke the taboo and destroyed the *yaje* or the path to it.

The shaman acts as an assemblage of web-like connections through *ccusi'pa*. That is why the actions by which shamanic agency is destroyed are conceptualized as “cutting”: cutting the path connecting the *cocoya*, the *yaje a'i*, and the shaman; cutting the shaman's long, trailing, enabling ornament (*andu'si*); cutting the *yaje* brew; and cutting the shaman himself, or rather his ever-expanding, ever-connecting body. The cuts destroy the network of relations that comprise the shaman's potential to act. It is all too fitting that the substance that cuts the connections is blood. More specifically, it is reproductive blood, whether of a menstruating woman or a pregnant person, either the prospective mother or father. To the *cocoya* and *yaje a'i*—who do not get pregnant, menstruate, age, or die—blood carries the stench and stain of mortal, earthly life as well as its means of reproduction. It is the perfect substance to break the bonds of distributed, collective agency that enable the shaman to do what he does—to know what he knows.

Cofán Shamanic Epistemology

In this chapter, I have presented an account of Cofán shamanic epistemology. It is my own interpretation; no Cofán person would describe

their conceptualization of shamanic knowledge using the same phrasing, even in A'ingae. In the most basic terms, I have argued that a Cofán shaman's knowledge is his capacity to act, and that his action depends on immediate perceptions as well as a web of overlapping, interpenetrating, and fully animate objects and beings that are ultimately consubstantial with the shaman's body. Shamans are *atesu a'i* (people who know), but they have many other titles. All relate to the shaman's actions, the instruments and beings that enable them, and the qualities and positions associated with the shaman's central functions: curing, defending, and killing.

Though he cures and defends, Cesario has never killed. He has told me as much many times, and I believe him. Yet he has also made it clear that he could kill if he wanted to. One night after dinner, and on another day during an interview, he named the Kichwa individuals he blames most for the attacks on his family and community. Cofán shamans not only enjoy a powerful form of distributed agency, they also suffer the profound pains of an equally powerful form of distributed accountability. Shamans such as Cesario are typically too strong to kill. Consequently, attacking shamans sometimes kill the people emotionally and physically closest to their real targets. Octavio told me his entire family is constantly sick because of the Kichwa shamans trying to kill his father. One of Octavio's sisters suffered so much while living with Cesario that she had to leave Duvuno for good.

When he dies, Cesario said, he will transform permanently into a *cocoya*. In that form, he will "carry" the men responsible for the attacks into his *cocoya* house, thereby killing them. At that point, he will have become what he has never been: a *fittipa* (killer). Such is the ambivalent position of the shaman: even those with the knowledge and desire to cure—those with "good" rather than "bad" bodies—must also have the knowledge to kill. Sometimes, the latter is the only way they can truly care for, or assuredly cure, the ones they love.

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CHAPTER 3

Representations of Shamanic Power in Siona Dream Narratives

Esther Jean Langdon

“Ēna,” I heard as I was pulled from my dreams early one morning in the Putumayo jungle long before it was light. “Ēna,” Ricardo Yaiguaje called again, then paused, realizing in his sleepiness that he had mistakenly addressed me by a term of endearment destined only for one’s spouse ... “Doña Juanita, it is time to rise and drink *yoco*.”

I rose and drank the bitter stimulant (*Paullinia yoco*) with Ricardo. It was July 1980, and I had returned to visit the Siona Indians of Colombia after several years of absence. On this trip, I proposed to Ricardo, an elder and shaman initiate, that we drink *yoco* every morning. I was motivated primarily by the desire to experience a sustained period of drinking this stimulant used daily by the Siona. My request also established the traditional performative context for dream narration, enabling me to understand the relation between daily events and dreams and the transmission of knowledge through sharing dream experiences. For a month, we rose before dawn, drank *yoco*, and exchanged our dreams. Ricardo had just finished an intensive period of shamanic training with Elias Lucitante, a Cofán shaman on the San Miguel River, and the content of his dreams,

as well as his interpretations of them, reflected that context and his desires, expectations, and feelings of power, as well as the ongoing events during the time I was with the Siona in 1980.¹

These dreams contrasted with those he told me during my first period of research (1970–74), when he was suffering from a chronic skin illness caused by sorcery from a rival shaman. At that time, his shamanic power was not sufficient to enable him to lead yagé rituals for purposes of curing, hunting, or other activities, and his dreams reflected his limitations. Narratives about dreams, like those about shamanic visions (Langdon 2013), are vivid performances of experiences with alterity. After discussing basic elements of Siona shamanism and the role that dreams play in understanding and influencing events, I examine Ricardo's dream narratives from these two periods in order to demonstrate how they reflect his "selfscape" (Hollan 2004) and the role of enacted performances of dreams (Tedlock 2004) in the transmission of knowledge.

Dreams in Amazonian Societies

The discussions in this volume contribute to the advances made in the anthropology of lowland South American over the last four decades and our understanding of shamanism as a transversal theme in discussions about knowledge of and interaction with an invisible nonhuman world (Calavia Saéz 2018; Viveiros de Castro 2014) and about the social construction of body and person (Calavia Saéz 2020; Seeger, da Matta, and Viveiros de Castro 2019). Independent of theoretical bias, Amazonian ethnographers take seriously alternative knowledge systems reflecting modes of access and communication with alterity (Santos-Granero 2012). In addition, studies of the role of senses in knowledge

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1. My dreams and his interpretations of them reflected worries about traveling alone and sadness caused by having left my family behind. I had repetitive dreams about my suitcases and other possessions being stolen. Ricardo interpreted them as indications of the possible threats I was facing and said that a woman may become a widow if she travels alone. To allay my worries after one dream indicating possible death, he said, "But perhaps that won't happen to you." His concerns over my health were manifested through various reminders that I was not to think too much about my children in order not to get sick.

and communication with the invisible world (Santos-Granero 2006) reveal how knowledge is contingent and situated in local contexts (Cepek 2016).

Dreaming, understood as a sensorial experience, has been long recognized as an important mode of communication and source of knowledge about the world as well as about the self (Orobitg Canal and Pitarch Ramón 2017). Over three decades ago, Price-Williams and Degarrod pointed out that “the dream *matters*, and is considered just as important as any other human activity, indeed more so in some groups” (1989: 206, original emphasis). Bartolomé and Barabas (2013) affirm that dreams are an ontological instrument, fundamental to shamanism, and that dreaming constitutes a native theory of knowledge. Arguing that it is a developed human capacity, and not a universal mental process, they propose that space-time experiences when dreaming constitute a shared cultural form. Amazonian societies have thoroughly socialized their dream experiences (Wax 2007), creating social situations for narrating them and social roles for who can recount them and who can interpret them. Family members may collaborate in interpretations, but there are specialists in dreaming and interpreting, these frequently being shamans. Dream narratives are marked by certain symbolic, poetic, and grammatical features common in myths. Certain cultures have a corpus of narratives that present typical dreams and their interpretations. Most importantly, recounting dreams is best considered as a communicative event developed as a performative tradition (Graham 1995; Tedlock 2004).

Dreaming is a kind of mediation between the known and unknown in a way parallel to that of the shamanic ecstatic journey, and in many cultures it is the portal of access to shamanic power. However, as noted by Belaunde and Echeverri (2008) for the Siekopai, a Western Tukanoan group closely related to the Siona, dreams are a means of access to the invisible side that is available to everyone. Many cultures have practices that train their members to perceive how dreams reveal what is happening in the spiritual dimension (Mezzenzana 2018; Santos-Granero 2006). Dreams are not an illusionary experience but have relevance for and influence upon daily life. Although dream theories vary from culture to culture as to the nature of the dream soul and the relation of unconscious and conscious thought, in most cases dreaming is interpreted as a journey in which the dreamer travels to the invisible realms of the universe. Humans must develop the capacity for discernment in order to understand this spiritual dimension of experience (Santos-Granero 2006: 75). Thus dreams, like shamanic flights, can shed light upon events,

provide an understanding of occult forces, and influence events, provided that the dreamer is able to see properly. Also, as shown by the case of Ricardo's dreams presented below, becoming sick as well as regaining health can be influenced by events in the dream world.

Siona Dreaming

In the case of the Siona, dreams are closely allied with shamanic power and are used for divining purposes, to understand occult forces, and to influence events in a way similar to the master shaman's use of the visionary experience induced by yagé (*Banisteriopsis* sp; ayahuasca). The Siona conceive of a multilayered universe divided into realms, each inhabited by invisible entities that act upon ordinary reality (Langdon 2017a). In their language, they express the relationship between the occult and visible as "two sides": "this side" (*ẽ ca'ncu*) is the ordinary and visible reality, and the "other side" (*yequẽ ca'ncu*) is composed of the normally invisible realms which can be entered through visions and dreams. Activities on the other side explain those on this side, and the two sides are best thought of as concomitant, rather than as separate (Overing Kaplan 1982). Through the possibility of transformation, the various beings of the universe operate on both sides, but with different forms. Nonhuman entities normally invisible appear as humans in dreams and visions, and shamans may transform into animals or assume invisible forms that can be felt, but not seen. In such a world, things are not always as they appear, and as a consequence, there is always a preoccupation with the true nature and intentions of whom one is encountering on the other side. The principle of transformation unifies what European cultures separate and implies the possibility of moving between different domains. The key to travel in this universe is to be conscious of yourself and where you are in order to avoid becoming lost and unable to return to everyday reality. As the Siona often express it, death is being lost forever; one does not come back from the other side.

As mediator between the invisible and visible realms, the master shaman ingests yagé to enter the other side and to "see" (*ẽña-*) and influence the entities there for the benefit or defense of his community. Although yagé experiences figure as most important in a shaman's acquisition of power and ability to see and influence unseen events, dreams are an integral part of shamanic apprenticeship and practice. Before ingesting yagé for the first time, the apprentice passes a prolonged period of isolation

and corporeal cleansing, drinking emetics and following a rigorous diet in preparation for his first visionary experience.² His readiness for that experience is signaled by a dream, in which a small man comes to him and tells him that it is time to drink yagé. The novice tells his master shaman of the dream, and he then embarks upon extended periods of drinking yagé under the supervision of his master, who interprets what he is seeing. Initially, he suffers from frightening visions that threaten his very being, but if he is brave in the face of these experiences, the Yagé People (*ëco bain*) will descend from their realm and begin to accompany him on his journeys to other realms of the universe to meet the entities dwelling there and to receive knowledge and gifts of power from them (Langdon 2016). The Yagé People are his allies, and they instruct him as to what he is seeing during his travels. If all goes well, the shaman initiate will eventually accumulate sufficient power to pass to the status of master shaman and lead the others in yagé rituals, as well as defend and protect his people.

Dream experiences and their interpretations parallel the visionary experiences induced by yagé. Dreams are used to acquire power, to discover true causes of misfortunes, and to influence events. When dreaming, the dreamer goes to *ëoru*, which is inhabited by the Dream People, *ëo bain*. They play a role similar to the Yagé People in the sense that they are the dreamer's allies. Like the Yagé People, they explain what is happening, and, in some cases, take an active role in defending the dreamer from danger. Dream experiences have an indexical relation to events on this side. What happens in the dream realm indicates events that are occurring or will occur on this side. Thus, dreams can announce or result in a good hunt for the next day, the onset of an illness, or the cure of an illness.

Dreams can also signal the acquisition of knowledge or power, as experienced by Ricardo after I had given him a remedy to alleviate his flu symptoms in 1971. The following day, Ricardo told me that while he slept, he traveled to a big city with a large garden full of healing plants. A tall white woman, dressed in white clothing with yagé designs, appeared and led him through the garden, telling him about the plants. This dream signals the acquisition of knowledge in a way similar to yagé visions. The

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2. Among the Siona, as among other groups of the region, shamans are traditionally male, although there is evidence of older women achieving the status. Today, with the expansion of the shamanic role as well as the increasing popularity of ayahuasca among non-indigenous groups, women shamans have begun to appear and lead yagé rituals.

remedy that I had given him had stimulated the sense of new knowledge. Perhaps I am represented as a possessor of knowledge; but the dream's motif is not uncommon. It reflects Siona narratives about yagé journeys to cities in the heavenly realm, of their inhabitants, and of the women who show them plants. Gardens, cities, and the people in the heavenly realm are all common elements in visions that index the acquisition of embodied power (Langdon 2016, 2017b).

Much of the Siona narrative tradition is devoted to descriptions of yagé journeys and events caused by battles between shamans, such as illness or other misfortunes (Langdon 2013, 2016). These narratives are important, providing instructions for understanding and interpreting events in daily life that have causes in the occult realm. They express certain deictic or iconic relations between the visible and invisible that furnish clues for interpretation of what is happening. In a similar way, the Siona have a tradition of narrating dreams in the early morning, either to explain what they learned from the dream realm or to have their dream experience interpreted. Besides containing similar motifs with yagé visions, as explained above, dream narratives also share the same iconic representations present in shamanic narratives and myths that signal correspondences between the visible and occult realms.

Thus, it is possible to say that they have an explicit and shared "theory" of interpretation. When asked about dream interpretation, any Siona can offer a series of metaphorical relations between dream elements and their meaning. Like other groups, they have what Basso calls "canonical dreaming imagery" (1987: 87) which expresses certain formulas for interpretations. If a hunter dreams of encountering a large woman dressed in red in the field and she offers him food, he will find a tapir the next day. When a large group of young women appear with a strand of white beads visible among the blue strands wrapped about their necks, he will hunt collared peccaries. Dream People drinking *chicha* (a fermented beverage made of corn or manioc) predict the coming of rain. A flooded river or the offering of rotten or black food by strangers signifies the onset of an illness. Changing from dirty or wet clothing to clean or dry clothing signals the return to health. Birds and dogs represent one's family members. The location of events is important: aggression, snakes, or fire occurring outside the house mean a potential shamanic attack, but such events inside the house signal more immediate consequences. When I told Ricardo about a dream I had with a snake, he asked me if it was in my house or not. When I responded that it was on the patio, he told me that I probably was not going to get sick.

I recorded the following dream told by Ricardo in Siona in 1972. It is an example of the narrative tradition that indexes the relation between dreams and daily events. The first line corresponds to the special formula in these narratives that serves as a key to the beginning of the dream. In this particular dream, it is his wife who interprets.

I dream and go. I go and arrive at a town. There are women, the white-collared peccary women. They are short women wearing necklaces of beads around their necks. In the middle is a strand of white beads. They have a lot of *chucula* [beverage normally made of plantains]. I arrive and greet them.

They say, "You have come."

I respond, "I have come to see you."

"We have made this *chucula*, won't you drink some?" they ask.

I say, "If you give me some, I will drink it." They pour *chucula* into a shiny painted gourd and give it to me. I drink it and return the gourd, and it falls. They fetch it and leave. They are good people. In the morning, I tell my wife that I had a dream.

She asks me what dream. I tell her that I went to where there were people and houses. They gave me manioc *chucula* and I drank it and gave them the gourd, which fell.

My wife says that it is a dream of hunting peccaries. That day I go hunting all day in the jungle with my dogs. The dogs smell the peccaries and run. I come to where they are barking and I tell them to search. They go a short way, about as far as don Alvaro's house over there. Then the noise calms down, and the dogs start barking at a hole. I cut some sticks and surround the hole with a fence. Then I build a trap with a vine and leaves of peach palm and wait until a peccary comes out. I snare and kill it. Then there is another, and I think that there are many peccaries. I kill the other. I go home with two, because the others broke the trap and ran into the jungle. I plan to hunt them the next day.

I go home and my wife asks me if I killed them and I say "yes."

Dreams and Consciousness or Attention

Dream narratives share similar metaphorical and metonymical elements with those about yagé journeys. Like yagé travel, dream travels require proper attention and response in order to avoid unfortunate results.

Experiences with the other side, whether in visions, dreams, or encounters when alone in the forest, require proper perception and action. The other side is a world of indeterminacy, and it must be perceived correctly in order to respond correctly. The importance of correct perception is explained in many narratives that deal with becoming lost in the jungle. According to such narratives, one fails to perceive clearly what he or she is encountering and is deceived by appearances. A spirit, or *huati*, appears in the form of a relative or familiar person and beckons the other to follow. They cross the threshold to the realm of the *huati* on the other side, and this dangerous invisible realm manifests itself as a village of houses instead of trees. Appearing as a human, the *huati* offers the lost person dark or rotten food. It is important to maintain consciousness, for if the food is accepted, the human will never return to this side. This side must be “remembered,” in order not to remain forever in the *huati* realm. In narratives explaining such events, wakefulness, attention, or consciousness will be expressed as “remembering this side” or “remembering who one is.” All travels or encounters on the other side, be they induced by yagé, a malevolent *huati*, or dreaming, contain the potential threat of causing the traveler to become lost and never to return or to suffer subsequently a serious illness or other misfortune.

Totally forgetting “this side” results in a lack of perception, the inability to “see,” and leads to mistakes, such as eating or drinking spoiled food that results in illness or death following the journey. As seen in the following narrative told by Ricardo in the 1970s, not only do dream narratives resemble others that relate experiences in the invisible realm, but also they show how the consciousness and actions of the dreamer are important in determining the outcome of events.

I had a dream. I slept and went to the village of the Dream People. In that place, some Dream People similar to the Cofán Indians came. They were young men, short ones, carrying blowguns. They also brought a catfish on a metal plate and said in their language, “Brother, eat this.”

“No, I won’t, I can’t eat,” I said.

“But our father sent this for you to eat. For this we came. Eat. He wanted to send it to you, so we came,” they said

“No, I don’t know how to eat that,” I said.

“Well, then don’t eat it,” they said, and I replied, “I won’t.”

“If it is going to be that way, we are going to leave something in the palm of your hand. Just wait and see.”

They spoke, and just as if I was awake here, I said, “No, take your food with you. I didn’t ask to eat fish.”

“Okay, we shall return. Our father sent it and we will return to his place.”

They left, and seeing this, I woke up in this place. Upon waking up from the dream place, I felt a rounded sharp pointed thing in the palm of my hand. I asked my wife, “What is this thing here? Light the candle to see.”

She lit one, and we saw that it was a sharp pointed spine from the head of a catfish, a spiny pointed thing. “It is a *rau* [witchcraft object],” I thought, “it is a spine *rau*.”

I woke up dizzy and feeling sick. I showed the spiny thing to my brother, Arsenio, and he said that it was a *rau* sent by a Cofán shaman on the San Miguel river. He had wanted my new wife to marry his son, and sent the *rau* to me to make me sick. My brother burned the *rau* and I didn’t get sick. But the Cofán did. His face became all black with pimples and he died.

Ricardo avoided misfortune or illness refusing the food offered, a common theme in shamanic narratives. In the dream, the food is an index of the attacking Cofán shaman’s *rau*, that is embodied when Ricardo awakes with the sharp pointed fragment of the catfish’s head in his hand. In other narratives about shamanic attacks, wounds inflicted by this fish represent shamanic aggression. When shamans use their power to cause harm, the Siona say that they remove the *rau* from their body and throw it at the intended victim in the form of a sharp pointed object, such as a dart, pointed rock, or other such object.

In this dream, Ricardo is not deceived by the false gift of food intended to bring him harm. He is firm in his refusal and points out that he is conscious of the situation. This is clear in the line “and just as if I were awake here, I said ‘no’”. This protects him from becoming ill. His shaman brother burns the pointed object, returning the evil to its origin, a common action in shamanic battles, and the attacking shaman dies with a black face, which Ricardo described “as if burned”.

However, as we see in another of Ricardo’s dreams, if deceived by appearances and one accepts the gift of food, the consequences lead one to journey downriver, towards death.

I dreamed and I went in my dream. I went to the place of the dead shamans, who came to me and offered me a bitter yagé. They wanted

to give it to me, and came with the yagé pots all prepared. "Come and drink, everyone is going to drink," they said.

"No, I won't drink, it will make me sick. I won't drink. Why should I drink it?" and I thought, "Why are you doing this, big brother?"

"Then you don't want it?"

"No, I won't drink it," I replied.

"If it is that way, we will go to other people and will give it to them to drink," they said.

"Fine, go and give it to someone else," I said.

After speaking, those people left.

After they left, I woke up on this side, and then I slept again.

I slept, and then I saw other people come, dead people. They were bringing very thick burned yagé.

"Drink this yagé. We are going to the yagé house. Come and drink this yagé," they said.

"Okay." It seemed as if I were on this side. "Okay, if you offer it to me, I will drink," I said.

They blessed the yagé, they blew over it and offered two mouthfuls to drink.

They offered it to drink and, as if it were on this side, I went and lay down in my hammock.

After a little while, the yagé came very suddenly. It came to me as if I were on this side, and I, poor thing, was very drunk in the dream place.

In the dream place, I vomited and vomited until I woke up here.

I awoke and got up. It was dawn and I didn't go back to sleep.

I woke up from a very bad dream and said to my wife, "What a dream I had. I will get sick. The dream I had means I will catch a sickness."

Suddenly, without remembering anything, I caught *rau*, rapidly I became sick.

My bones all were trembling, my whole body was feeling sick.

It started with a high fever. I went to bed, and then I vomited and vomited. I was really sick; I was truly dying.

As I was dying, I prayed to God.

I dreamed, went to the dream place and saw myself drunk on yagé going downriver. I traveled to the place downriver. Then the Dream People came to me, the other ones, the good ones.

"Oh, what are you doing coming here?" they asked.

“Return now. This is not a place where people come,” the Dream People told me.

“That path, the high path, go on that path, return on that path,” they told me. It was a long path, but very rapidly I returned.

Arriving here, I woke up. With that dream, I was well.

Although in his first dream, Ricardo is sufficiently aware of the danger and refuses the bitter yagé, this is not the case in the second dream that he has that night. He is deceived in the second dream, mistaking the dead shamans for his allies and feeling at home, as if in the waking world. Thus, he drinks their bitter yagé and becomes ill. In his feverish dream, he travels downriver towards death until his allies the Dream People intervene and send him home.

Ricardo's Dreams of Power

Ricardo came from a line of distinguished shamans. He was the son of Leonides, a famous shaman who died in the 1940s. His brother, Arsenio, mentioned in the narrative above, was the last publicly recognized Siona shaman casique. Upon his death in the 1960s, Ricardo was expected to assume the role of master shaman in order to lead the communal yagé rituals. Among those of his generation, he had the most extensive and orthodox shamanic training. However, when the elders gathered to drink yagé after his brother's death, Ricardo, as well as the others, saw only darkness and not the beautiful realms on the other side. Ricardo was unable to assume the role of leadership of yagé rituals, and the community remained without a master shaman. For almost two decades, yagé rituals ceased to be held, except when a visiting shaman came.

Social changes and life experiences undermined Ricardo's determination to follow in the steps of his father and brother. Born around 1900, he underwent traditional shamanic training at a time when the Putumayo region was attracting national attention because of rubber and other jungle resources. Rubber patrons lived among the Siona, and he was involved in the transportation of the crude rubber along the jungle paths. Although Siona children were forced to attend the Capuchin mission school after it was founded in 1914 in Puerto Asis, Ricardo's father kept him out of it in order to finish his shamanic training. It was a difficult period. The presence of rubber collectors, the missionaries, and the school caused a number of epidemics, which reduced the Siona

population drastically during the first thirty years of the twentieth century and provoked the abandonment of several of their villages (Mongua Calderón and Langdon 2020). In the 1960s, petroleum extraction began in the region and was accompanied by a massive invasion of colonists from the highlands. By the 1970s, the Siona lived in a radically changed world in comparison to the time of Ricardo's youth. Because the Siona were concentrated in a small reserve surrounded by colonists, traditional forms of subsistence were becoming no longer viable due to ecological and demographic factors, and economic and social ties were tying them to the regional colonist population. Ricardo feared and disliked to associate with the colonists, and he had dreams of them pursuing him or attacking him in the streets of Puerto Asís, the mission settlement that was growing into a small city. They represented danger, deceit, and cruelty to him. They also represented a threat to his shamanic power.

Rau, referred to in Ricardo's narrative as a sorcery object, is best understood as a dense, multivocalic key symbol that conveys the various meanings of embodied shamanic power and its manifestations, very similar to the *davu* described by Cepek and Lucitante for Cofán shamanism in this volume. It is a substance dispersed within the shaman's body which represents knowledge and power. *Rau*, as embodied knowledges, accumulates in the shaman's body through the frequent ingestion of yagé and his journeys to the other realms, where he learns to negotiate with the nonhumans. It is what gives the shaman initiate the power to cure minor illnesses and the master shaman the ability to lead others in yagé rituals and to cure serious illnesses that defy normal treatments. As we saw above, he can remove *rau* from his body and "work" it into a concrete object that is sent as a projectile for purposes of defense or harm.

Shamanic apprentices trained initially with a trusted shaman, learning from him, and then drank with others, often from neighboring groups, always seeking to increase their knowledge. Particularly important in the regional shamanic network were the Cofán, and the Siona not only drank yagé with them but also intermarried. In general, the Cofán were trusted allies, and they shared ritual activities as well as similar concepts of shamanic knowledge that are described by Cepek and Lucitante, in spite of speaking different languages.

Not all novices have the capacity to accumulate sufficient *rau* to reach the level of master shaman, and master shamans can lose their *rau*. It can be "damaged" through an attack by rival shamans or through contact with polluted substances or people. Shamanic initiates and master shamans are said to be "delicate," and certain restrictions and prohibitions

must be observed to preserve their *rau*. One major source of pollution comes from menstruating or pregnant women and postpartum mothers. The close presence of women in such states or food cooked by them is dangerous. During these liminal periods, their husbands also share the same polluting odor that will attract *huati* that damage shamanic *rau*, causing aches in the bones and loss of knowledge. Shamanic power is not guaranteed for life, and once gained, it must be protected.

Ricardo's failure to become a master shaman was perhaps, in part, due to the traumatic events that he witnessed during the early twentieth century as well as the transformations of the region and abandonment of Siona practices intended to protect the shaman's *rau*. He worried about the abandonment of prescriptions related to pregnancy and birth that could result in damage to his *rau*. Also, his autobiographical narratives emphasized attacks from rival shamans throughout his lifetime in order to destroy his *rau*. The attacks began in his adolescence, when he was beginning to drink *yagé* regularly. In one attack, he was alone in the jungle when he heard, but did not see, an evil *huati* beneath the ground, causing serious illness that could only be cured by removing his *rau*. A shaman sent the *huati* to damage his *rau*, causing a setback in his shamanic training. Throughout his life, he suffered from such attacks, and the chronic skin allergy that afflicted him during my work with him in 1970s was one example of this. He had not seen the rival shaman's harmful *rau* on the path when he passed on his way to the field, thus resulting in his skin affliction that bothered him for years.

His feelings of impotence and inability to defend himself and others was expressed in many of the dreams he told me during my first period of research. One, which he had on the night of his first wife's death, explicitly expresses his feelings of powerlessness.

Once my wife was drunk on *chicha* and was arguing with me. My father arrived and asked why I was arguing. "I'm not. She is," I replied. She began to insult my father, telling him that he was not a *curaca* [shaman], that he didn't know how to drink *yagé*. He said, "When I die, you are going to die." She got sick after he died. Her sister came to take her to be cured in Piñuña Blanca. They went, and a Makaguaje came and drank *yoco* and performed the healing ritual. "It is bad," he said, "we need to cook *yagé*." I told him that I didn't know how, but my friend did. So, I got the firewood and water and the other cooked. We drank and the *curaca* started to cure. She didn't get better. Then Rafael Piaguaje [another shaman] came the next day, drank *yagé*, and

cured. She didn't get better. They drank one more night of yagé, and then no more. Then she had her period and was in the menstrual hut.

I had a dream. My father came in a big black canoe and said, "I am coming to take your parrot." The ancient shamans were with him, and they were wearing black clothing, like priests. He shook the *pichanga* [a leaf whisk used in curing] and the other *curacas* responded. The parrot was in a nice cage. My father also had two little chicks. "I am going to leave you to take care of the chickens [his two children], but I am taking your parrot," he said. "If you were a good *curaca*, you could have easily cured her. The door of the cage opens easily, but no one came to talk to me. So, I will take her."

I got up and drank *yoco*. Santurdino [an elder with shamanic knowledge] came and asked what I dreamed. I told him, and Santurdino said, "If you would have known how to cure, she would be well. I also saw your father. He and the others went to *besi huati*."³

That night my wife died, because the *curacas* had taken her soul.

During my years of fieldwork, many cases of illness were attributed to the *huati* of dead shamans, who were angry at the victims. In this case, the wife had insulted Leonides' shamanic power and knowledge. Other reasons cited for similar attacks included living near a dead shaman's old house site, making too much noise, and passing too near the deceased shaman's yagé vines in his abandoned fields. Ricardo's sense of inadequacy is clearly expressed in the dream and in the narration of events surrounding his wife's death.

These general feelings of powerlessness were expressed by other Siona elders in their dreams. For instance, Estanislao, Ricardo's younger brother, told me about his dreams when his wife was very ill. He had been trying to cure her with the few chants he knew, hoping that one perhaps would succeed. Then he started having bad dreams. In one, he saw an armed man come towards him. The Dream People warned him to duck, promising that they would defend him. In another, an anaconda came up from the river into his house, spewing out water. It was coming to swallow him. Someone gave him a machete to fight with, but the Dream People told him not to bloody his machete, that they would defend him.

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3. The *besi huati* is a bird or animal that comes and sings when one is going to die. Ricardo said that he had never seen one, but that it is like a person with a body of pure fire that stands on a *rau*. It sang frequently in the past, but it hasn't been heard for a long time because of the absence of shamans.

They chased the anaconda back and said that the snake was really a shaman, since it had been afraid. "With this dream," Estanislao said, "I gave up trying to cure my wife and started buying injections for her."

When I returned to the Putumayo in 1980, Ricardo was in a very different state. His skin allergy had calmed down. He had just returned from a prolonged period of shamanic training with his Cofán brother-in-law, Taita Elias, and was planning to return to the San Miguel region to train with Casimiro, another Cofán shaman. He was the most confident I had ever seen with regard to his acquisition of *rau*. His experience with the Cofáns dominated our conversations and permeated his dreams at the time. As opposed to the 1970s, the majority of the dreams during this period were interpreted as the promise of renewed knowledge and power. The dreams were often stimulated by an event during the previous day, but their motifs were similar to yagé visions and reflected the shamanic training Ricardo had recently experienced. In several dreams, he encountered whites, Japanese, his deceased brother Arsenio, and his brother-in-law Taita Elias. From all of them he received gifts of shiny objects that represented the *rau* growing inside him.

On July 5, 1980, we were sitting in the evening with some younger Siona, who began to speak of *Capitán* Sanders, the Summer Institute of Linguistics pilot who had flown Ricardo and others to the missionaries' base for linguistic work. We talked of the experience of flying, and how one could see all the way to the "end of the world," where there is a very large sea. The next morning, Ricardo told me that he had dreamed of *Capitán* Sanders. He came dressed in celestial blue clothing and a blue hat with a white star. Then Taita Elias came in a large boat. He told Ricardo that he brought gifts and had come to see how he was living. He offered Ricardo a clear *aguardiente* (cane liquor) in a glass that had beautiful designs. He went to the boat and gave him clothes, machetes, mirrors, and beads. He invited him to go traveling with him and said he would show him all the big cities, people, and places on the sea. Ricardo said that he woke up when he started to get in the boat.

That evening, we spoke about the Japanese. Ricardo had great curiosity about foreigners, and often asked me about them and their material objects. The following morning, he related his dream.

I dreamed and I went. I came to a big city. There were many people there, Japanese People, since last night we spoke about them. They had crystal necklaces and a table that was pure glass. They offered me a cookie to eat. It gave me shame to eat, but they kept insisting, so

I went to the table and ate. Then they gave me something to drink in a very shiny cup. Then they announced that people similar to me were approaching. A large number of Indians came dressed in *cusmas* [tunics]. The women had big necklaces full of toucan feathers. They said that they were the “Bat People” [an extinct clan related to the Siona], and they invited me to their house. I pardoned myself from the Japanese and went with them. On the path I woke up.

A few days later he had another dream of acquiring power.

I dreamed. I was in my house and my dead brother, Arsenio, came. He came and greeted me, “Are you well, younger brother?” I said, “More or less.” Arsenio took out a crystal *rau* and began to cure me. He examined the crystal. Then some people came with beautiful designs on their *cusmas*. They gave me a shiny golden necklace and told me to always wash my hands before touching it. They also gave me a golden box, and told me that I should likewise wash my hands before touching it. They also said that I should never wear any dirty clothing and always change when it becomes dirty.

Ricardo’s daughter-in-law was also present when he recounted this dream on that early July morning. Picking up the usual meaning of dirty clothing in dreams, she commented that the dream must mean sickness. “No,” said Ricardo, “this dream is about the *rau* I will receive when I return to drink yagé with Taita Casimiro.” He was receiving instructions as to how to treat the sacred and to care for himself. Ricardo then went to his room and returned with a long pointed palm nut some three inches long, a “hummingbird palm nut.” It was like a hummingbird’s beak with a bulb on the end. Taita Elias had received it from the Yagé People and gave it to Ricardo as evidence of his growing *rau*.

Two dreams convey with particular emphasis the new sense of power he was feeling. They contrast markedly with the dream he had when his wife died and he was unable to cure her. They occurred at the end of my stay in 1980 and were stimulated by an event that happened in front of his house that day. Pacho, an elder some years younger than Ricardo, was returning from a drinking party upriver and collapsed unconscious in front of Ricardo’s house. Ricardo rushed out immediately, calling to his wife to fetch some herbs, and began blowing tobacco smoke and chanting over Pacho until he regained consciousness and was helped home. That night, Ricardo had two dreams relating to the incident.

In the first, he saw clearly the path going upriver by his house. The Dream People told him that a priest was coming and that Ricardo was not to let him pass. They told him to block the path. Then a priest dressed in black came in his direction, carrying a black rope. They greeted each other and Ricardo asked him where he was going. He said that he was pursuing a *muchilero*⁴ bird that had gone downriver, in the direction of the house of the elder who had fainted. "No," Ricardo replied, "there are none around here and perhaps you should return upriver." The priest said that the bird was making too much noise by his house upriver, and that Arsenio had sent him to catch the bird. The Dream People told Ricardo to prevent him from passing. So, Ricardo told the priest that there were no birds downriver, and that he should return up the path. The priest started to turn back, but then suddenly spun around and threw his rope, attempting to entangle Ricardo. Ricardo caught it as it came flying through the air and threw it back, causing it to wrap around and around the priest, who returned, all bound up, to from where he had come.

I mentioned that this dream must be related to the incident of the previous day, and he agreed. The *huati* was seeking Pacho and had been sent by Arsenio (the dead shaman), who was angered because of the noisy party held near his abandoned house site. It indeed had been a loud party, since we could hear the yelling from Ricardo's house a kilometer or more away. Ricardo said that Pacho drinks too much at these parties and also screams and yells a lot without knowing what he is saying.

In his next dream, Ricardo was in the midst of many non-Indigenous people. One became angry at Ricardo and wanted to strike him in the temple. "The man's arm was fat and strong, and mine is skinny, but I finally hit him in the head and knocked him over," he said, and that afterwards, the man asked his pardon.

In both these dreams, Ricardo is able to defend himself successfully. The first dream parallels the dream he had regarding his wife's death. His deceased father, a powerful shaman, comes to take his wife, who angered him while he was alive. However, Ricardo's shamanic knowledge and power to protect his people is very different in the two periods. In the case of his wife's death, he is unable to perform the yagé curing ceremony to save her, and his dream signals his lack of power. In 1980, after performing a curing ceremony and reviving Pacho, he is the

4. Once again, the human is represented as a bird. Also, it is extremely common in Ricardo's dreams and visions for the aggressive shaman to be a white person or dressed as a priest in black.

defender in the dream, using his *rau* to counteract the aggressor's. He returns the black rope, *rau*, to where it came from, injuring the *huati* in black. The imagery of the second dream also expresses clearly Ricardo's sensation that he was gaining force, as his thin arm repels that of the aggressor.

Final Thoughts

As we now know about most Amazonian peoples, the development of attention to and in dreaming is a mode of knowledge about the invisible side as well as about the self. The Siona, and shamans in particular, have techniques to develop attention and to invoke dream experiences that allow them to influence events. They expect to have three dreams in a night. After each dream, the dreamer rises to waking consciousness in order to remember the experience and then returns to dreaming. Ricardo estimated the hour of the night by the number of times he had dreamed. It is common to ingest a remedy in order to induce a particular dream. Tobacco is ingested to dream about the next day's hunt. *Yoco* is taken to see the true causes of an illness in a dream. In a world of indeterminacy (Nadasdy 2021), it is necessary to see clearly and mediate with the forces that act upon visible reality. As observed by Grotti and Brightman (2016: 93) for the Trio of Surinam, knowledge about the invisible side is not gained through detached discourse, but is expressed in terms of experience and events. Dreams constitute an important source of events and experience with the invisible realm that is available to all.

As a noncorporeal experience, dreaming is a process of knowledge acquisition and transmission that contributes to individual and collective well-being through enactment. It is an experience of nonlinear events in which the self emerges through feelings and images (Wax 2007). Ricardo organizes his narrations following the tradition of dream and vision narratives that are commonly told by the Siona. Although they share similar structure, symbolic content, and event motifs, the shared tradition is not a fixed corpus of identical narratives, but a shared "methodology" that aids the narrator to organize dream and visionary experiences. Memories of the dream experience fit a cultural form of expression and interpretation that is rooted in the context of individual subjective feelings and ongoing political and social events. The daily practice of narrating one's experiences with alterity contributes to self-attention and knowledge

through transforming noncorporeal feelings and images in a narrative form. Such narratives of the self constitute a process of double reflexivity and contribute to the organization of one's selfscape (Grotti and Brightman 2016; Hollan 2004).

As a shared tradition, dream narratives are also an important form of transmission of knowledge to the collective group. As discussed in an earlier article about narratives of experiences with the extraordinary in visions and other encounters on the other side, narrative has an important role for conveying knowledge about encounters with the occult reality and instructing one as how to interact (Langdon 2013). Narratives about yagé experiences prepare the novices for what to expect and also provide knowledge about how to perceive correctly and mediate with the invisible realm. That is also the case for dream narratives. Narratives provide a structure of expectations and indices for interpreting and mediating with the invisible side of reality, whether the experiences are induced by ritual use of substances, by dreams, or by unexpected encounters in daily life when one crosses the threshold between the seen and unseen sides of reality. They provide clues for how to interpret the noncorporeal experiences that provide important knowledge about the world. In the case of dream narratives, they aid in training attention, enabling the person to act consciously within the dream as well as to interpret the experience upon awakening.

The performative aspects of dream narratives among the Siona and other Amazonian groups (Graham 1995; Tedlock 2004) contribute in a major way to collective sharing and knowledge transmission that differs radically from Western science. Cultural traditions of dream narratives not only facilitate the organize of the noncorporeal experience, but as enactments, they are part of the creative activities that contribute to the endurance of groups. As Wax observes, "Dreams should be regarded as aesthetic productions akin to poetry, music, dance, and even possession-trance—intrinsically social and cultural" (2007: 91). The performance of dream narratives, through the use of poetic language, transforms individual experience into a public enactment creating a qualitatively different experience for the listeners (Berger and Del Negro 2002) as well as transmitting knowledge necessary to understand the fractal universe, one that is marked by multiplicity, transformations, and indeterminacy. As we see in the translations of Ricardo's dreams, the first line of a dream narrative signals to the listener how to understand the special quality of the experience (Bateson 1972): "I dreamed and I went in my dream." It focuses attention of the group on the experience of alterity and transmits

knowledge about an important preoccupation among the Siona: How to see the true essence of appearances in a world of indeterminacy? Like narratives about visions, dream narratives are not metaphorical representations of experience; enacted dreams index correspondences between the visible and invisible.

Finally, in thinking about the theme of other modes of knowledge, as posed by the authors of this book, it is important to recognize not only that dreams do matter for Amerindians, but also that the possibility of participating in the communicative contexts of dream narratives can be a privileged experience in the process of methodological exploration that permits us to move beyond our rational, question–answer mode of understanding the other as well as ourselves (Bruner 1981; Tedlock 2004; Tobón 2015). After recording and transcribing Siona narratives, I returned to the narrators to discuss key concepts that I did not understand. This resulted in an important dialogue that helped me to understand key concepts about knowledge and its acquisition. Like the dialogue between Cepek and Lucitante about Cofán knowledge or the Urarina, Shuar, and Shiwiari collaborators' responses to questions about knowledge, the dream exchange sessions with Ricardo in the early morning after drinking the stimulant *yoco* became a privileged way to understand, participate in, and interact with him about experiences with alterity. It enabled me to go beyond a rational discussion about dreams, as I, too, shared my noncorporeal experiences through narrative.

It has been fifty years since I recorded Siona dream narratives. It was a period when the Siona language was still spoken by most adults, families still awoke in the early morning to drink *yoco* and recount dreams as they produced baskets and fiber bags and other objects that require patience. Today the language is spoken by only a handful of elders. Although the status of Indigenous peoples has improved in Colombia, the community has experienced radical changes due regional violence and extractive activities. The traditional context for narrative enactment in the early mornings has disappeared with the language. They no longer drink *yoco* when they rise before dawn to exchange dreams as they produce baskets and other objects. The sound of radios accompanies the rising sun and children are pulled out of bed to rush off to school. My recent visits to the Putumayo have revealed that the older adults are still familiar with the canonical dream imagery, but it appears that only the shamans continue the tradition of narrating experiences about the invisible side (Langdon et al. 2023).

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CHAPTER 4

Substantiating Kinship as Knowing Relation among Urban Uitoto *Desplazados*

Amy Leia McLachlan

Uitoto Knowing Relation

In Uitoto epistemology, ancestral plant beings are understood to be the ultimate sources, media, and authorizers of world-making and curative knowledge. In a formulation broadly reflected in the ethnography of Indigenous Amazonian communities, that knowledge is materialized in the bodies of kin as transformations of plant substance, and rematerialized in the productive work of kinspersons as the proliferation of plant kin. Each of these three terms—knowledge, bodies, and kin—is understood to encompass relational constellations of mutually susceptible beings, human and more-than-human, and to be the focus of ongoing (indeed perpetual) labors of making and curing (Londoño Sulkin 2004, 2012; McCallum 2001; Vilaça 2005). Uitoto proprietary ritual knowledge and quotidian practical knowledge alike are understood to be relational in several senses. First, knowledge is made and remade in relation: it is registered in the body of a knowing person through active work by human and more-than-human kin. Second, that knowledge is ultimately addressed to the making and remaking of properly cured relation. And, third, knowledge is made through gendered relational dynamics, through the mutual transformation and activation of complementary gendered

substances that are the material form of gendered ancestral plant beings. I use the phrase “knowing relation” here to foreground the relational, distributed, and more-than-human dimensions of Uitoto epistemology.

Kin Work, Plant Work, and the Problem of Substantiation

Kinship is always the outcome of processes of making, that is, of productive and reproductive labor, as well as the kinds of affective and social labor that di Leonardo (1987) calls “kin work.” Kin *making* is also a kind of work that can be engaged in as deliberate ethical or political practice, in the midst and against the grain of the particular historical formations in which we find ourselves entangled (Butler 2002; Clarke and Haraway 2018; Kimmerer 2013; Lewis 2019; Murphy 2017; Sharpe 2016). The work of making kin, as feminist scholarship has taught us from many contexts and in many registers, is central to the making and remaking of our shared worlds.

The consequences and constraints of that work turn on forms of collective knowledge by which the entailments of kinship are reckoned and recognized. In the context that is the focus of this chapter, that knowledge is gendered and gendering, a matter of active contestation, and a site of creative transformation.

Following Marxist feminist attunements to the perpetual labors required to make and remake kin, social worlds, and economic life, along with the rich body of work translating Indigenous Amazonian ritual and quotidian practices of kin making, in this chapter I approach the ongoing kin-making work of Uitoto migrants as a matter of gendered expertise and historical world-making labor. In order to foreground the labor involved in making and remaking social worlds, along with the social orders of knowledge that those worlds hold, this chapter follows the quotidian work required to assemble, transform, circulate, and evaluate the substances that materialize both knowledge and kin ties for Indigenous Uitoto people from the central Colombian Amazon living under conditions of forced displacement in Bogotá. Prior work on the ethnobotanical and ritual exegesis of bearers of proprietary knowledge among Uitoto communities, and other People of the Center (see the discussion of ethnonyms in the following section), has produced beautiful and important translations of their expertise and moral epistemology (see Candre 1996; Echeverri 2000; Londoño Sulkin 2005). That work has largely represented the experiences and social positions of male

elders. Those translations have also primarily grounded their accounts in the ecologies and moral economies of communities living in the central Colombian Amazon, in the traditional territory of People of the Center, and in other riverine settlements where land and climate make possible the cultivation and gathering of the plants central to Uitoto knowledge transmission and kin work.

This chapter follows earlier contributions (including Alexiades 2009; Gonzalez, Ortiz, and Frausin 2012) tracing the transformation of Indigenous Amazonian economic and social lives under conditions of urban migration and forced displacement as a result of armed political conflict and conflict surrounding extractive economies in Uitoto territories. It seeks to contribute to an emerging understanding of the historical transformation of Indigenous Amazonian knowledge traditions as lived practices shaped by ongoing dynamics of colonial occupation, toxic extractivism, and political violence across the region. More specifically, the aim of this chapter is to consider a question at the heart of comparative epistemology—the comparative study of knowledge as a matter of historically situated social practice—through a particular problem confronting Uitoto *desplazados* (displaced persons) in their efforts to make, remake, and sustain “knowing relation.”

That particular problem is: For people who understand themselves, their kin, and their shared capacities for discerning and practical knowledge to be constituted by the substance of ancestral plants, what does it mean to live where those plants cannot? For Uitoto migrants and *desplazados* from the central Colombian Amazon living in the margins of Bogotá—the high-altitude Andean capital of Colombia—this is a problem of ongoing, if not ordinary, concern. In Uitoto migrants’ accounts of their own trajectories of illness and curing, migration and tenuous emplacement, the remaking of knowledge, kin, and cosmos are interdependent projects that rely on the circulation and transformation of ancestral beings whose bodies are plants. The transmission of proprietary knowledge, like the transmission of ancestral plant substance, under conditions of displacement, turn on and transform relations of kinship with and through plant beings and the ecologies of their home territories. In the wake of extractive and political violence in their home territories, many Uitoto migrants find themselves living far from the human and more-than-human kin that make possible the transmission and substantiation of knowledge. As a result, among Uitoto migrants living far from their home territories and ecologies, the reproduction of ancestral knowledge, posttraumatic curing work, and the regeneration of a

world of knowing relations depend on practices of adaptive and adoptive experimentation with new plant kin, and with unfamiliar forms of familiar plant beings. Those experiments are fraught with suspicion, critique, and possibility. This chapter follows Uitoto urban migrants through their work to assemble and experiment with plant substitutes, and highlights the counterpatrilineal forms of kin making that are emerging as a result.

Uitoto Migrants in Bogotá: Ethnonyms, Territories, and New Formulations

This chapter draws on fieldwork with migrant and displaced People of the Center living in urban border zones and in the peripheries of Bogotá, between 2006 and 2024, among whom the majority identified as Uitoto. This ethnolinguistic identification is one among several that together constitute the *Gente de Centro*, or “People of the Center.” This ethnonym refers to a network of closely allied linguistic groups who locate the origin of human life in a sacred site between the two rivers, the Caquetá and the Putumayo, that frame their traditional territories. Prior to their colonization amid the genocidal violence of the early twentieth-century rubber trade (especially the period 1908–33), patrilocal and patrilineal *maloca* (roundhouse) communities of Murui Muina, Nipode, Muinane, Bora, Ocaina, Andoque, Miraña, and Resigaró speakers intermarried, feasted, and raided in one another’s communities (Echeverri 1997; Pineda Camacho 1985, 1995, 2000, 2001).

The decimation of the People of the Center at the hands of Peruvian rubber barons during what Pineda Camacho (2000) has called the “rubber holocaust” left the one in five who had survived scattered from Iquitos to Manaus, along the rubber ports of the Amazon river, and across the Caquetá and Putumayo river systems, from the Andean piedmont to what is now the Colombo-Brazilian border. Subsequent missionization and incorporation into Colombian territorial and extractive economic orders have complexly transformed the social, ecological, and epistemological relations of People of the Center (Echeverri 1997; Pineda Camacho 1985, 1995, 2000, 2001; Taussig 1987; Tobón 2008).

Following the collapse of the global trade in wild rubber, their traditional territories have been subsumed by successive extractive booms and busts. A mid-twentieth-century boom in wild forest products, timber, and furs was succeeded by the ever more prevalent trades in cocaine and gold, and a not insignificant presence of pharmaceutical bioprospecting

since the turn of the twenty-first century. Each of these cycles has drawn armed actors into their territories, and drawn community members into armed groups (see McLachlan 2020; Tobón 2008). The traditional territories of People of the Center have been, along with other Indigenous territories in the Meta and Vaupés departments of Colombia, focal points of both illicit coca production and US-funded campaigns of aerial fumigation against coca as part of the “war on drugs” and “Plan Colombia” (Ramírez 2011). The aerial dispersal of the toxic defoliant glyphosate has left persistent toxic traces in the soils and waterways of those territories, as well as in the bodies of human and more-than-human inhabitants. The official cessation of the armed conflict between state and insurgent forces in the region in 2016 has further opened those territories to occupation by illegal loggers, cattle ranchers, and gold miners, and to the consequent poisoning of waterways with mercury and pesticide runoffs. The result is that People of the Center, including the Uitoto migrants whom I accompanied in their transits between home reserves and urban settlements, number among the estimated eight million internally displaced persons impacted by Colombia’s decades-long armed conflict, including its environmental consequences.

In this chapter, which draws primarily on research with People of the Center organizing in Bogotá as a Uitoto *cabildo* (or Indigenous political collective), I refer to my interlocutors collectively as “Uitoto” following their own primary collective self-identification. The migrants whose exegeses on proprietary knowledge transmission I translate here all identified primarily as Uitoto, and spoke Murui or Nipode. Most members of this community count among their kin and ancestors members of multiple linguistic groups among People of the Center, and were often speakers of at least two of those languages in addition to Spanish. This reflects both a continuing practice of exogamy between linguistic groups of People of the Center and the particular dynamics of displacement, resettlement, and reterritorialization that characterize the ongoing colonial history of People of the Center.

Beyond historical and continuing relationships of territory, affinity, and membership in a constellation of shared ritual responsibilities, People of the Center’s epistemological accounts articulate a shared set of premises regarding the nature and conditions of knowing subjectivity. Rich translations of these (Candre 1996; Echeverri 2000; Londoño Sulkin 2012) have focused largely on men’s exegetical accounts and self-descriptions, and on the proprietary ritual and esoteric curing knowledge to which male elders primarily maintain access. This chapter seeks to

expand the scope of these questions to consider the gendered enactment of those premises and the problems they frame, through attention to complementary modalities of kin-making agency, in a context where the balance between those modalities is shifting along with the foundations of knowing relation to and through plant kin.

Making Knowing Relation

In this chapter, the particularly situated epistemological problem faced by urban Uitoto *desplazados* as they work to substantiate kin ties and knowing relation is approached through perspectives offered by the rich record on Amazonian ethnographies of the making of knowledge and knowing bodies, by tools for critical and comparative epistemology that intersect in feminist science studies, and by Uitoto praxis in its ever-shifting shapes.

In the ethnography of Indigenous Amazonian communities since the 1980s, productive, reproductive, curative, and ritual processes across scales appear to be centrally concerned with the making and remaking of properly knowing persons. That is, the materialization of the conditions of epistemological possibility is a project at the heart of social life. Further, that materialization is inseparable from the practices that substantiate kinship. Indeed, the making of kin and the making of knowledge—of the conditions of true knowing—appear across the literature as two sides of one perpetual process of transformation. Both kin making and the reproduction of knowledge depend on the constant work of kin, and the constant transformation of, incorporation of, and negotiation with figures of generative alterity.

MacCallum, for instance, demonstrates how Cashinahua kinship is made continuously, through the fabrication of bodies in and as relation (including settling in the body shared substance, names, and affects). That work is gendered and gendering; it depends on the complementary work of masculine and feminine forms of, and capacities for, making kin: “[I]n the Cashinahua case, ... kinship is not understood to derive from ‘consanguinity’ or shared inherited substance. Kinship is constantly fabricated, in the Cashinahua view, just as bodies are, through daily iteration of a moral and social nature, in the many processes that constitute sociality” (MacCallum 2001: 24). Conklin (2001), meanwhile, compellingly traces the making and unmaking of Wari kinship through relations of compassionate consumption that both define and undo kin

ties. Highlighting the “chronic instability” of embodied and perspectival location in Amazonian worlds, and the work of continuous transformation required to maintain what is often presumed in a phenomenological approach to be given—a human sensorium—Vilaça troubles the presumption of a human phenomenological grounding for the question of the fabrication of knowing bodies in Amazonian societies:

Works on Amazonian groups tend to emphasize the processes of making bodies, without giving due importance to the processes of transformation [that] challenge the understanding of the body founded on a biological substrate. ... [T]hese works emphatically demonstrate that substances transmitted through conception are less important than or at most equally important to those acquired and exchanged through social practice, thus asserting that the body is not given at birth but made throughout life. ... [A]lthough the idea of a body under continual fabrication contains in itself the notion of transformation, when this dimension is explored the ethnographic focus is generally restricted to the universe of those we conceive as humans. (2005: 459)

Focused on the emergent and continuous semiotic processes involved in embodied knowledge and relation, Kohn (2005, 2007) similarly calls for an approach to Amazonian epistemological practices that does presume these to be exclusively or exceptionally human.

Making knowing relation relies on capacities to attune human sensoria with those of other-than-human kin (including ancestral and divine plant beings, spirit “owners” or “mothers,” and a panoply of predatory and potentially dangerous inhuman others). The primary condition of epistemological possibility in these accounts is the materialization of an extended kin body, participating in the shared aesthetic attunements that constitute one phenomenological location among many in a perspectival cosmos (Conklin 2001; Taylor 1996; Viveiros de Castro 1998). That location is a precarious one, and one that requires continuous work to reproduce (Londoño Sulkin 2012; Vilaça 2005).

Writing from a radically divergent epistemological context, in his early formulation of a practice of comparative epistemology, the physician Ludwig Fleck argued for an understanding of the transformation of scientific knowing as distributed, contingent, the result of intergenerational work on the sensory capacities of younger generations, and perpetually unstable. Against individualized conceptions of cognition and

knowledge production, Fleck argued that “what actually thinks within a person is not the individual himself but his social community. The source of his thinking is not within himself but is to be found in his social environment and in the very social atmosphere he ‘breathes’” (Fleck [1935] 1981: 47). He characterized that social atmosphere as convening in “thought collectives,” defined by “thought styles”: shared cognitive habits and aesthetic attunements to the objects of collective attention that defined the perceptual universe and the boundaries of epistemological possibility.

These intersecting projects are at once “moral projects in perpetuity,” as Londoño Sulkin (2004) has it, and projects of continuous (re)productive labor. In this way, they resonate with the continuous labor of social reproduction highlighted by Marxist feminist assertions of the perpetual labor required to (re)produce kin relations and/as economic ones. They also echo the collaborative work required to “make things medicinal”—what Chudakova calls “the laborious process [of] pharmacopoiesis ... the fastidious forms of labor and care demanded by the making of medicinal things” (2017: 342).

The embodied and affective dimension of knowledge making (as kin making) resonates with recent ethnography of knowing relations to plant kin as lovers or as children. Work from diverse contexts facing the existential challenges of climate catastrophe has emphasized knowledge making as both affectively conditioned and existentially consequential. Archambault’s exploration of plant love in Mozambique, for instance, engages “[a]n anthropology of affective encounters [that] focuses on the transformative potential of everyday engagement with the material world, with moving things and other-than-human beings, to explore what it entails, or might entail, to be human” (2016: 265). Locating contemporary Canela kinship with plants between colonial histories and anthropocenic futures, Miller explores “the myriad ways in which the Canela, by loving and caring for their plant kin, are resisting and becoming resilient to present and future environmental challenges” (2019: 2). The Canela resistance Miller describes echoes the therapeutic labor towards habitability that Langwick situates in Tanzanian experimental gardens as “complex experiments in what constitutes the therapeutic ... that unsettle assemblages built through colonial plantations, national development, and extractive capital” (2018: 417).

The experimental remaking of relations to and through plants in each of these contexts is addressed to circumstances where kin and/as relations have been altered by colonial, industrial, and extractive processes

at multiple scales. Feminist and Indigenous science studies call our attention to the remaking of bodies in relation to the nonconsensual and complexly (im)perceptible exposures to extractive and industrial processes, and offer modes of ethnographic attention to the possibilities of remaking knowing relation. Murphy (2017) offers us the concept of “alterlife” for attuning to the forms of relation made necessary and possible by industrial exposures. Tuck (2009), moreover, challenges us to “suspend damage” in our framing of those transformations.

These studies highlight the existential stakes of transforming knowing relation to plant kin; they also, crucially, insist on our seeing plant knowledge and knowing relation as historically situated and politically consequential.

Substantiating Plant Knowledge

In Uitoto talk and praxis, the substance of ancestral plants is the foundation of human kinship, consciousness, agency, and relationality. Plant substances comprise the matter of the body, and the commonality of bodily substance is the foundation of kinship. Plant-persons, including tobacco, coca, manioc, and chilies, are addressed as agents responsible for the genesis and ongoing curing of a moral cosmos. Human and beyond-human kin relations based on shared substance constitute a world of distributed agency and shared consciousness, of continuous mutual susceptibility, and of radical openness to the actions, states, intentions, and work of others—a condition resonant with Sahlins’s general definition of kinship as the “mutuality of being” (2013).

Ancestral plants, in this context, are the foundation of what European philosophy calls reflexive consciousness, of moral discernment, of affective and aesthetic attunements. They are also the medium of relationality with an animate cosmos. Uitoto bodies are figured as constellations of ecologically and cosmologically complex relationships, as agentive and sentient plant-persons materialized in human form. Uitoto people describe their bodies as substantially composed of, and subjectively contiguous with, the substance of sacred plants. These include manioc starch, chili paste, tobacco paste, coca powder, yagé, medicinal herbs, palm ashes, palm fruits, and a panoply of other wild and cultivated plants. Indeed, in some senses, Uitoto people’s bodies appear in their descriptions (and in the ritual, medicinal, and quotidian organization of their somatic states) as microcosmic archives of entire rainforest ecologies. Conversely, the complexity of

social, ecological, and cosmological relationships are mediated and regenerated through the ever-transforming substance of related bodies.

Here, the mutually mediating substantiations of plant and human subjectivities anchor and activate a system of curing knowledge that is described as effective across scales (from the body to the cosmos). The discernment, correction, and reproduction of properly human subjectivity through the care and cultivation of properly human substance represents in Uitoto communities, as it does across the Amazonianist literature, a Sisyphean project that occupies processes at every scale of quotidian and ritual life. The reproduction of moral human sociality (of a world of loving, convivial, mutually nourishing relations, or, the good life [Overing and Passes 2000]) arises here from a seeming paradox: making properly cured human subjectivity means correctly, and continuously, embodying nonhuman agency in a human form, whose substance is and is not distinctly human. Londoño Sulkin has richly explored the moral evaluations and entailments of People of the Center's accounts of correctly or improperly substantiated subjectivities (2004, 2005, 2012). He highlights the contingent (2012: 33), and morally contested (2012: 75) quality of those substantiations, and notes a particular emphasis among his interlocutors on tobacco as the seminal medium of patrilineal kinship and proprietary knowledge (2012: 32).¹

Attending, as McCallum does, to the gender complementary transformations involved in kin-making labor, I suggest, allows us to see kin making among People of the Center as arising through two complementary modalities. Further, under conditions of tenuous emplacement and material precarity, the relationship between those modalities is equally contingent. Not only do Uitoto conceptions of knowing relation configure a particular set of quandaries for migrants; in their experimental solutions, migrants are transforming the relationship *between* modalities of kin making.

In one modality, Uitoto kinship is made along vertical patrilineal lines of descent, substantiated and mediated through the transmission and mutual incorporation of *ambil* (tobacco paste mixed with the rendered

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1. "Mambeadores [bearers of ancestral coca and tobacco knowledge] vacillated between making tolerant claims to the effect that each people had received a different form of tobacco with which to make its people, and more critical, segregationist and hierarchical claims to the effect that the tobaccos of other lineages, clans, or peoples were morally suspect" (Londoño Sulkin 2012: 102).

ash salts of forest plants), and at least ideally via clan proprietary tobacco seeds, which is figured in cosmogonic myth and curing exegesis as the semen of the creator ancestor Moo Buinaima, and figured as the key animating substance of masculine agency (see Candre 1996; Echeverri 2000; Londoño Sulkin 2012).

In a second modality, kinship is made through the horizontal and processual production of consubstantial resonance, through the plants that substantiate women's labors and feminine moral capacities, foods made of rendered manioc starch—including *cassave*, *farinha*, and *ca-guana* (manioc cakes, manioc granules, and manioc drinks)—chilis, and cooling herbs.

Like the tobacco plants that substantiate the transmission of clan membership and proprietary knowledge, tobacco-based knowledges and agencies are narrated as potentially jealous, predatory, and reactive. Patrilineal descent is figured as exclusive, and the forms of knowledge that it both authorizes and depends upon are described as equally predatory and fragile. In contrast, the substances of adoptive and processual kin making that characterize feminine agency reflect the powers of (in-marrying) women to transform volatile and potentially antisocial forces (affinity) into sweetened relations across broad networks of mutual care. Patrilineal kin reckoning is exclusive, proprietary, and bound by ritual and substantial protocols that organize relations of authority and authoritative knowledge. The horizontal and adaptive kin making attributed to women is marked by its pleasure in expansive and experimental incorporation through sustained care. In Uitoto people's accounts, these gendered modalities are described as complementary and mutually activating. In situated practice, however, they are differentially foregrounded as the basis of moral and political claims to and on kin. Rather than a claim that men and women possess and transmit complementary modes of expertise, or that they practice gendered styles of thinking, borrowing Fleck's image of the "thought style" lets us see gendered difference as produced in (and productive of) complementary forms of plant work *as* kin-making practice, engaging in a particular "style" of knowing relation to plants that is constitutive of gendered difference.

Displacement, Circulation, and Suspicion

The question of properly substantiating the botanical sources of knowing relation takes on a different urgency under conditions of forced

displacement and urbanization, as the substances of human-plant kin worlds are increasingly dispersed. The substantial grounding of those kin worlds becomes more tenuous (when, for instance, the plants that authorize the transmission of ancestral knowledge cannot be grown or found in the city; when the only manioc you can feed your baby comes in industrial powdered form and is one more thing there is no money for), at the same time as it becomes, in the absence of other possible forms of consubstantializing care, the only way to calibrate somatic and affective resonance, to produce the sympathies of consubstantial incarnation among dispersed kin. Experimental, adoptive, and adaptive, Uitoto *desplazados* test and stretch those possibilities, often in disagreement and as a matter of constant contestation.

For displaced and migrant Uitoto people living in tenuous urban settlements, the project of rebuilding life in the city depends on solving a constantly emerging problem of substantiation. The weekly flights from La Chorrera and Araracuara to Bogotá are consequently packed with bundles of *mambe* (toasted coca powder) and *ambil*, *omai* (chili paste) and *cassave*, live and prepared plants, and remedies that cannot be found, grown, or replaced in the city. Many migrants rely on kin in their home territories to send packages of prepared tobacco paste (and the vegetable salts that temper it) and coca powder on weekly cargo flights from the departmental centers nearest their reserves. These arrangements both maintain material ties to kin in the territories and materialize new and extended ties of kinship, as ever more extended chains of exchange are activated to move bundled plastic bags full of precious foods (including female kin's chili paste, prized insect foods, or smoked game) and special medicines gathered in forest spaces, along with Chicolisto canisters full of coca powder and medicine bottles full of tobacco paste.

Those chains of circulation extend substantial and curative lifelines from kin in home reserves. They are also the basis of contested economies of cash exchange and complex reciprocities that render the status of any particular migrant's jar of *ambil* a matter of suspicion. Migrants themselves often rely on the purchase of tobacco and coca for their own ritual and curing work, just as others rely on their sale for cash that might let them sustain their households and extended kin networks. The moral status and efficacy of those substances, though, are matters of heightened concern.

This is both a problem and an opening to possibility. It is a tenacious problem for knowledge transmission when viewed from within a patriarchal framework where proprietary knowledge is substantially

identified with male authority, clan property, and vertical channels of patrilineal descent. It also represents an opening to, or activation of, possibilities of horizontal, adoptive kinship when this is understood to be composed through a range of substances, and a range of exchanges and forms of care in the city and between city and reserve. This adoptive mode includes commodified plants and market exchanges that are absorbed into kin work as cash is converted into substances of care for children, for other *desplazados* temporarily joining migrants' households, and for other kin living in occupied reserves. Uitoto people's reckoning with those possibilities is ongoing, difficult, and variable in terms of the severity of its consequences.

The shapes and consequences of the problem of substantiation are also gendered. The substantiation of patrilineal corporeality, and the exchanges that mediate apprenticeship to male *sabedores* (ancestral knowledge bearers) and healers, are complicated by the dispersal of kin and the impossibility of cultivation in the city. They are also complicated, though, by the construction of the substances of masculine modes of knowing relation as morally, substantially, and qualitatively distinct. The two key substances of patrilineal knowledge transmission—coca and tobacco—are described as highly susceptible to pathological transformation as they move between households and through urban economies.

Coca

Driven by necessity, some *desplazados* sell *mambe* and *ambil* to consumers ranging from *paisanos* (other People of the Center) living outside of their territory to curious hippie aficionados, and from devoted anthropologists to extractive entrepreneurs exporting Indigenous medicines to European markets. The sale of coca in the form of *mambe* is cited as belonging to a spectrum of abuses against coca as an ancestral person. The furthest end of that spectrum is the mass production of cocaine—a perversion that migrants often described as provoking the ire of its spirit owner in the form of armed conflict and illness.²

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2. Londoño Sulkin describes similar evaluations: "Several [growers for the cocaine market] mentioned to me that they knew cocaine to be a maddening substance and the coca it came from to have been corrupted; therefore, they kept their plantations for *mambe* and for cocaine apart" (2012: 121).

Dimas, for instance, claimed that while coca that has been adulterated as cocaine was clearly the cause of widespread pathology, *mambe* that was sold was inert: "It's useless for curing ... and for sorcery. ... *Mambe* that's sold is made for that purpose [to be sold], and that's all it's good for." Nora was less persuaded of *mambe*'s neutrality in commodity form. Living as a *desplazada* in Bogotá, she supported her four children by selling *mambe* that her mother and aunt sent her from their home reserve in the Caquetá. She attributed her chronic ill health, and the headaches and fatigue that she and her children suffered, to the fact that she was selling coca to white people. In much the way that Uitoto *desplazados* often experience their grief over separation from human kin as physical pain, Nora felt coca acting back on her and her children as a consequence of the disarticulation of their extended kin body. She was even more circumspect about the circulation of *ambil*, preferring to use only the tobacco paste that her mother sent her, conjured only for her. She considered the sale of *mambe* and *ambil* by migrants to be part of a larger, and largely pathogenic, shift in relations to the ancestral plants:

This thing of selling *ambil* and *mambe* is new, from 2000 up to now. Before, if one made *mambe*, it was to *mambe* in the *maloca* [round-house], with the elders, the wise ones, all that, to educate children, young people, it was all that. Not now. Now the youth have taken to *mambeing* like this [like a vice], they're all crazy. That's why they've lost their judgment, now they don't have judgment. Because that's not that way. Didn't I have a nephew? A nephew of mine used *mambe* at twelve years old [too young, and without ritual preparation]. That's why he's like a crazy person. He doesn't have judgment. He doesn't want to study, nothing. He doesn't have a head for anything. He only thinks crazy things.

Tobacco

Candido and his brother are both traditional healers who were displaced to Bogotá after they were targeted by the *guerrilla* for their community organizing work in their home reserve. Rather than making *ambil* as they learned to in their home communities, from the green leaves of tobacco plants whose seeds have been transmitted patrilineally, stirred without rest over embers for two days, and from vegetable salts rendered from wild palm roots, Candido told me that they had experimented with

using the cheap cigars that are sold bundled in every Bogotano corner shop. They stewed these slowly over an electric burner to make the paste, which was then mixed with vegetable salts that they rendered from lawn clippings or coconut husks which they were allowed to collect and burn in the city's botanical garden. The rendering process has been a source of contention with the botanical garden's staff, because the grass smokes very heavily when burned, filling the whole garden with smoke. People in the garden's scientific administration complained that the smoke was concentrating in their offices. The resulting tarry paste was also problematic. "Does it work for curing?" I asked, a bit astonished by the extent of substitutions in play. "It works ... but look, it's like a copy. It's like that food that they're selling over there on the street"—he pointed at a street vendor's cart where possibly the world's saddest *empanadas* languished, greasy and rapidly aging. "It keeps you from starving, but it's not the same; that's how it is, it doesn't let your spirit die of hunger, but it doesn't feed you, it's not the same. It has another flavor, it makes you drunk very quickly, it doesn't let you concentrate well."

The ambivalences and hopes mixed in Candido's experimentations point to both the urgency and the limitations of questions of the moral substantiation of knowing relation for displaced Uitoto persons. Uitoto conceptions of substance depend on the reciprocal embodiment of plant and human kinspersons, on relations of ongoing mutual care, and on forms of intersubjective porosity and sympathy that define the horizon of moral intersubjectivity. Beyond that horizon lie illness and inhumanity, and the antisocial and dehumanizing forces typified in the forms of ongoing violence that have defined the colonial process in Uitoto territory since the beginning of the twentieth century.

Women's Kin Work and Shifting Shapes of Kinship

On the other hand, Uitoto migrants in general, and women in particular, have proliferated forms and channels for the circulation of plant substances, along with forms of knowledge, social information, and narratives of family trauma, political violence, and the upheavals of migration, that are inseparable from curing work. Against suspicion and skepticism, Uitoto people also locate the possibilities of futures and of cured relationality, of emergent forms of life made out of conditions of occupation and forced displacement, in the plant work that reconstitutes kin bodies dispersed in time and space.

In contrast to the risks associated with shifting circulations of coca and tobacco, the substances that materialize feminine modes of knowing relation are figured as both more and less dangerous. The indispensable substances of feminine kin work are manioc starch and chili paste, and these must both be made edible through women's expert cultivating and curing knowledge. Manioc foods are produced from poisonous tubers of *Manihot esculenta* (bitter manioc), whose roots contain cyanide that must be removed through fermentation and straining. Chili paste is made from that fermentation liquid to which hot peppers have been added and concentrated by long simmering. In contrast to masculine plants, manioc and chilis are characterized as more dangerous, in that they begin (like affines in general, and in-marrying women in particular) in potent and potentially lethal forms. As they circulate, however, they are treated as less dangerous and less susceptible to pathogenic transformation. Manioc starch is the most widely circulated and circulable substance of kin making. Served in massive quantities to guests at feasts and household work parties (*mingas*), it is both the most innocuous and the most potent kin maker.

In rainforest communities, feminine knowledge and styles of kin making are materialized and mediated through the myriad cultivars that compose the adoptive kinworld of women's *chagras* (swidden gardens). Manioc cultivation is the primary focus of Uitoto women's labor and adoptive caretaking in the *chagra*, and the rendering of staple foods (including *cassave*, *farinha*, and *caguana*) from the starch of toxic tubers occupies a considerable portion of women's working days. The qualitative transformations (from bitter to sweet, from toxic to nourishing) involved in the process of rendering manioc mirror the transformations at work in Uitoto women's kin-making practices: turning ambivalent and potentially dangerous strangers into kin through the accretive work of feeding and caring, and the expert management of potentially destructive affects (see McLachlan 2011). For Uitoto *desplazadas* to Bogotá, having to live far from their gardens and cultivate kin also means adapting feminine styles of knowledge and kin-making expertise to the resources and challenges of their urban lives. It is precisely women's expert knowledge in neutralizing the toxic and exogenous sources of sociality that enables their experiments with substitution under conditions of displacement.

The feminine powers of abundance, adoptive incorporation, and quotidian world making that feature in People of the Center's ritual exegesis and cosmogonic myths (Candre 1996; Londoño Sulkin 2012) are equally

at work in Uitoto women's urban lives. Migrant Uitoto women often arrive in the city alone, or alone with their children. In some cases, they have fled their home communities in the wake of violence against their male partners; in others, they have fled their partners' violence. Many Uitoto youth come to the city to pursue secondary and post-secondary education, and young unmarried women in particular are often sent to stay with extended kin in the city by parents anxious to avoid their seduction into armed groups, or by armed actors. While male leadership remains important to the political, mutual aid, and ritual collaboration of the migrant Uitoto community in Bogotá, the community as a whole is sustained by Uitoto women's engagements in informal cash labor, and capacities to circulate resources, material and social support, and (crucially) plant substances throughout the city, and between city and reserve spaces. *Desplazadas* don't only find ways to sustain themselves and their children in their nearly impossible circumstances; they also proliferate forms of mutual support between far-flung peripheral settlements, and sustain kin ties in their home territories by circulating cash in exchange for plant substances which they consume and sell, and by establishing households that are also hubs for more temporary migrants from reserve communities.

Manioc

An expert kin maker and ingenious experimenter, Saira described how she been actively adapting the forms of manioc she could access in her neighborhood on the outskirts of Bogotá. She gleaned discarded *yuca* ("white people's manioc") from the refuse piles outside green markets to ferment in her apartment and make *cassave*, *omai*, and *caguana* for her children and grandchildren living with her, and for the other displaced *paisanas* she welcomed into her crowded apartment.

Denaya's experiments were animated by the same capacity for creative adoption. She bought industrially produced manioc starch to make *caguana* for her family, and to share with other *desplazadas* who met for weekly mutual aid meetings. She also was responsible for providing *caguana* to a *mambeadero* (ritual coca circle, for traditional education and healing) hosted every week by a Uitoto *cabildo* in Bogotá.

On one typically overcast Sunday afternoon, a women's mutual aid group of a Uitoto *cabildo* convened its weekly meeting in the empty upstairs room of a house owned by an order of nuns, located an hour by bus

down the mountain from the *invasión* (untitled settlement) where many of the *cabildo*'s women had recently settled. Others traveled from the city's southern edge, or tumultuous center, carrying supplies and their children bundled against the cold and fog.

That week's meeting had a less formal agenda than previous weeks: while meetings regularly included guest speakers from state offices offering resources to victims of the armed conflict, or from other women's rights organizations, this week was dedicated to making *caguana* together. Ubiquitous in ritual feasts and household work parties, *caguana* is made of manioc starch mixed with simmered and strained pineapple water. In their home reserves, it would be the result of several days' work processing manioc, the outcome of months of garden labor, and the immediate materialization of cooperation to gather firewood and to lift heavy pots of boiling water. In the city, making *caguana* also required expertise and cooperation, but in a radically different ecology of plants and allies.

Denaya had found a butcher in her *invasión* who used manioc starch to make sausage, and had managed to convince him to sell her several kilos. For these, she called on any of the women who were able to contribute spare pesos. This was starch of a different type of manioc, and the outcome of radically different kinds of agricultural and industrial labor. But the flavor was passable, and no one noted any harm in the substitution. Luz had acquired several overripe pineapples from the produce market in her neighborhood—a settlement of *desplazados* among industrial and automotive businesses in the south. That market was a blessing, she explained, because she had been able to make friends with some of the vendors, who would give her unsellable produce for free or at a discount “because they love me.” Firewood had been gathered from the waste piles of construction sites in the neighborhood of the meeting, and spare bricks and rebar were pressed into service for a grill.

Pooling cash, industrially processed manioc starch, and salvaged pineapples, the women mixed their new knowledge of the city and its possibilities in plastic bins borrowed from the nuns along with the space, and laughed as they scooped out warm cupfuls for everyone gathered. The resulting *caguana* was not the work of women's gardens, but it was, like the full vats their female kin living in the territory serve to guests at work parties or feasts, the substantiation of their social networks, their transformative resourcefulness, and their attunement to the risks and riches of their environments, including the marginal

economic spaces of the urban periphery navigated by *desplazados* from across Colombia.

As we sat sipping from our plastic cups of sweet warm manioc drink, the teasing, celebratory atmosphere that reigned in these weekly women's meetings was briefly damped by a critical voice piping up from the corner of the room, where the father of one principal organizer (and husband of a treasured *abuela*, or elder leader) was sitting with three other older men. "Women, this is all very good, but what's missing here is authority." "What's that, grandfather?" answered one of the meeting's conveners, a young female leader. "What's missing here is authority, the word of the ancestors, of tobacco and coca." The women stopped chatting long enough to make out what critique, exactly, was being leveled, and then turned back to their stories, serving each other and each other's children warm *caguana* and moving on.

This was far from a scene of open disagreement, but it was a moment of marked gendered difference, and one that marked the difference in how gendered expertise (as embodied capacity, and as the capacity to embody) is enabled and constrained for Uitoto migrants. It is a window into a shift in the center of gravity for organizing and shared identification. The substances of the city, availing themselves to what are figured as distinctly feminine modes of substantiation (of materializing expert transformative knowledge in rendered plant substance, and in the bodies of kin), enable the materialization of feminine knowing relation and kin making through substitutions that are figured as unproblematic enough to go unremarked.

One other night every week, the same space was borrowed and transformed into a *mambeadero*: a circle of ritual and curing dialogue, centered on men's exchange of *ambil* and *mambe*, and dedicated to the transmission and substantiation of men's moral and curing knowledge. Women of the community took turns preparing *caguana* for these gatherings, the presence of which was taken for granted. The atmosphere of these gatherings was sober and inclusive, governed by respectful and reflective attention to the teaching of elders.

The substances that animated this space, however, were matters of contestation and critique. Unlike manioc, which Londoño Sulkin describes as "a substance more or less shared by real people in general" (2012: 95), tobacco and coca are figured as the media both of patrilineal descent and of a narrowly constrained position of moral authority. The "correctness" of proprietary strains of tobacco, which could be substantiated with relative straightforwardness through the patrilineal

transmission of seeds and proprietary cultivation in home reserves, was a matter of serious moral complication in the circulatory economies through which migrants exchanged plant substances.³

Conclusion

Uitoto women migrants navigate the city within a gendered epistemology that figures them as embodying expert moral capacities for gathering, transforming, and sweetening (detoxifying, making edible) the substances that enact and give proof of their kin-making powers (see McLachlan 2011). The figuration of the plant bases of men's knowledge as proprietary, jealous, volatile, and predatory, on the other hand, limits the possibility of effectively transforming available or substitute plant forms into plausible proof of their capacities to substantiate kinship. Scrounged manioc starch is not a moral threat in the same way that bodega cigars are, as manioc (and the feminine modes of kin work it materializes) is not invested with the same narratives of singular descent or particularized and dangerous efficacy as tobacco.

A network of *desplazados* working constantly to mitigate one another's difficulties sample, smell, and speculate their way through markets and public gardens where potential new plant kin lay in wait. Making tobacco paste from bodega cigars and grass clippings, bathing colicky babies in uncanny decoctions of white people's basil, this improvisational work is the subject of mixed curiosity and suspicion, in nearly equal measure. The process of improvising new routes for plant kin from reserves into the city, and of experimenting with substituted strangers from city spaces, is part of *desplazados'* continuous work to materialize kin ties in the city, across the distances of displacement, and in a relational cosmos that risks slipping out of alignment at all moments.

Rather than seeing this as a one-way story of loss and the impossibility of reproducing a knowledge tradition, taking a lesson from the rich literature on Amazonian epistemologies lets us see that knowledge and kin-making power, and the intelligent and distributed bodies that carry each of these, are always being made and unmade, gathering and coming undone. Many things are lost in the midst of displacement. The relations that hold a world together are dispersed and distorted. But a lesson of

3. Londoño Sulkin also notes the relative mobility of manioc in contrast to men's plants (2012: 95)

Uitoto migrant plant work is that a world that must be continually re-made is one always open to transformation: to the incorporation of new forms of knowledge, new forms of kinship, and new forms of knowing relation.

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CHAPTER 5

Shifting Linguistic Geographies: When Ideologies of Language Collide with Histories of Language Contact in the *Altiplano*

Sandhya Krittika Narayanan

What kinds of knowledge are associated with knowing, and being from, a place? Linguistic anthropologists have long been fascinated by unpacking the role of language in shaping local understandings of a landscape. Studies of toponyms and place-names have been an important avenue in this regard, providing linguistic evidence to illuminate social histories of contact, settlement, and population movement (Hedquist et al. 2014; Hercus and Simpson 2009). Other forms of culturally embedded knowledge have also been noted in phenomenological approaches to “place making” by connecting speech acts and verbal genres with other embodied forms of knowledge evoked by linguistic practices (Basso 1988, 1996).

Such approaches to language, knowledge, and the local landscape are often positioned as local, emic ways of knowing, which contrast with broader ideologized perspectives on the relationship between language and geography, and how those connect with social identity and social formations. In particular, localized perspectives on language and landscape often conflict with the ideologization of language as a discrete, denotational object (Silverstein 2000), whose boundaries are then projected onto a specific set of speakers who are also associated with a bounded,

designated space in the landscape. This ideological turn has been framed as one outcome of modernity that couples language with nascent proto-nationalist ideologies, essentializing language as the unifying identity for a population of speakers (Bauman and Briggs 2003). The expansion of such ideologies across much of the modern world contributed to the gradual proliferation of nationalist movements in the nineteenth and twentieth centuries (Anderson 1983) and the inscription of those same ideologized boundaries around the naturalization of ethnic groups and identities (Barth 1969; Brubaker 2004). Both these linguistic nationalist and ethnolinguistic perspectives and orientations reproduce a specific kind of association between social identity, language, and geographic spaces, where language indexes a social identity that also points to an imagined, bounded space on the landscape (Silverstein 1998). These associations, however, are also ideological, semiotic configurations, which implies that they are but one of other competing, and sometimes contradictory, perspectives (Irvine 2022). The disjunctures between competing semiotic arrangements and ideological perspectives can be approached as a site of intellectual inquiry, to begin interrogating different epistemological frameworks for navigating and locating linguistic and social differences within a landscape. Moreover, careful analysis of competing epistemological frameworks also necessitates closer scrutiny into what kind of object “language” is, and how its ontological status shapes speakers’ attunement to the relationship between linguistic differences, social identities, and geographic boundaries (Ferguson 2019; Hauck 2023; see also Hauck, this volume).

This chapter explores the consequences that result from the semiotic reconfiguration between language, social difference, and the local landscape among Quechua- and Aymara-speaking communities in the Department of Puno, Peru. I argue that such reconfigurations change how language and linguistic differences are used to locate social differences in the landscape and, through this, transform the kind of object that language is. Located in the high-plateau region of southern Peru known as the *altiplano*, Puno has long been recognized as a site of long-term inter-Indigenous language contact between Quechua- and Aymara-speaking communities (Adelaar and Muysken 2004). Today, this history is ideologized into discourses that present Puno as the home of Indigenous ethnic “Quechua” and “Aymara” groups (Narayanan 2018)—discourses that project each language onto a specific set of speakers who are associated with and mapped onto distinct spaces in the *altiplano*. These discourses create a specific kind of semiotic configuration between language, social identity, and belonging on the local landscape, where

social identity and geographic connections are indexical values derived from the ideologization of Quechua and Aymara as distinct languages. This configuration, however, is also a significant semiotic transformation and epistemological shift away from older modes of conceptualizing the relationship between language, social identity, and geographic belonging. In these alternative ways of knowing and understanding linguistic and social difference, language and social identity were, and to a certain extent still are, forms of embodied practices rooted and derived from the recognition of distinct named places and communities in the landscape. Through these semiotic transformations, the ontological status of Quechua and Aymara as “languages” and understandings of multilingualism and linguistic difference are also altered, impacting the future of Indigenous language maintenance and multilingual praxis in Puno.

This chapter will begin with an overview of the ways that the relationship between place and social difference has been described in the literature on Andean Indigenous communities. This overview will highlight two important aspects fundamental to geographic and social difference that will also be important for Puno: relative distinctions between places as being geographically defined along an axis of “above” and “below,” and understanding social differences and social identity as coterminous with a named location that is cultivated through life-long kin-making practices with human and more-than human entities (see McLachlan, this volume). These ethnographic insights become important to understanding the maintenance of multilingualism in the *altiplano*, where I show how language is conceived as one feature that comprises a broader set of embodied knowledge and practices (see Barrett, chapter 10, this volume) that distinguishes community boundaries and social differences. I will then pivot to an analysis of the growing prevalence of discourses of inter-Indigenous, ethnolinguistic difference, which, I argue, reflect a shift in how *puneños* (people from Puno) discursively locate linguistic and social differences in the landscape. In tracing the contours of these semiotic reconfigurations and epistemological changes, I highlight how such transformations are linked to changes in the ontological nature (Hauck and Heurich 2018) of language for Quechua- and Aymara-speaking *puneños* in Puno.

The Highs, the Lows, and the Local in the Andean Landscape

Spatial patterns and spatial symbolism have been central to informing ethnographic and ethnohistorical understandings of Indigenous

Andeans' ways of knowing their landscape. The vast and varied Inka empire, *Tawantinsuyu*, for instance, was divided into four according to directionality (i.e., cardinal directions) and elevation. As Zuidema (1964) notes, such divisions were fractal in nature, replicating the tetra-partitioning of the empire within the Inka capital of Cusco. Moreover, each subdivision mapped onto specific kin groups or *ayllus*, providing a structural link between kin group affiliation, intergroup relationships, and specific areas on the landscape. Kinship, therefore, was important to the social and spatial organization of the Inka empire. But equally important in these distinctions was the significance of elevation differences, which formed a primary axis of defining social differences between different kin groups in the region. Thus, while Cuzco and *Tawantinsuyu* as a whole were divided into sets of fours, those groupings also clustered around two core poles of elevational difference: *hanan*, or "above/higher," and (*h*)*urin*, or "below/lower" (Zuidema 1964).¹ Communities and *ayllus* that were located above in higher elevations were called *hanansaya*. Those located at lower elevations or below were referred to as (*h*)*urinsaya*.

Elevation was an important social category in Inkaic, and even pre-Inkaic, forms of social organization. Moreover, the ability to create and control networks across both the high or "above" elevations and the low or "below" spaces was also fundamental to Indigenous Andean practices of kin making and, later, political administration. This geographic and ecological organization was subsequently termed the "vertical archipelago" (Murra 1972, 1985), and is often attributed as the reason for the Inka's success in governing a vast empire that spanned across different ecological zones and climates. Connections, such as networks of reciprocity and care, were maintained and created through kinship practices such as marriage (Wernke 2007). Yet through the formation of such networks, goods, food products, and resources cultivated at specific elevations could be exchanged across different elevations. Relationships and alliances between *hanansaya* and (*h*)*urinsaya* places enabled the survival of individual communities and kin networks, while providing a

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1. Both these Quechua terms are still used in Puno and Cusco. While the spellings for (*h*)*urin* and (*h*)*urinsaya* are found in older ethnohistorical writings of the Inka, the meaning of "below/lower" today is spelled and pronounced as *uran*. For instance, the underworld (i.e., hell) is often referred to as *uranpacha* (lit. "land below"), while heaven is referred to as *hananpacha* (lit. "land above").

framework for state administration and control during the height of the Inka empire and continuing into the Spanish conquest and reorganization of the Andes (Mumford 2012).

Although the division between *hanan* and *urin* is largely associated with the Inka, the importance of understanding space and social difference as a relationship between communities and people “above” and “below” predates the rise of the Inka empire. In the *altiplano*, space was organized according to the logic of *urqu* and *uma* (Bouysse-Cassagne 1986). *Urqu*, or “peak,” referred to the territories on the high Andean peaks, such as the high-altitude communities west and northwest of Lake Titicaca. *Uma*, or “water,” referred to lands in the lower elevations starting east of Lake Titicaca and going down into the Andean lowlands and Amazonian jungles.² As directionals, *urqu* and *uma* also establish a relationship and mode of differentiation between communities and people within them by positioning them in terms of higher (*urqu*) and lower (*uma*) elevation. More significantly, conceptions of being above or below are rooted within the physical landscape by using the physical presence of mountain peaks or the lake to calibrate these differences within the high plateau of the *altiplano*. Like the relationship between *hanansaya* and (*h*)*urinsaya* in the “vertical archipelago,” communities and pre-Inkic polities that emerged after the fall of Tiwanaku (ca. 1000 CE) were also divided into both their *urqu* and *uma* subdivisions, illustrating both the interdependency and reciprocity between communities at different elevations, and the social significance of elevational differences like “above” and “below” in understanding and recognizing social difference.³

Equally important to Indigenous Andean understandings of the landscape is the recognition and importance of named places. Named places can include the names of communities, but can also include significant promontory points such as lakes, *apus* (mountain deities), and other specific named locations. In a practical sense, knowing the name of a place or geographic landmark is important to understanding where one might be located physically within the world. But on a deeper level,

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2. These two Aymara words are still used today to colloquially refer to mountains/peaks and water.
 3. According to Bouysse-Cassagne (1986), wealth typically flowed from lower-level *uma* communities to their respective *urqa* communities. Such a flow of resources not only granted higher prestige and power to *urqa* communities, but also lent kin groups associated with *urqa* elevations higher prestige in relation to the *uma* kin groups within their social networks.

knowing the location of named places and geographic landmarks is also necessary to recognizing social differences. In other words, social differences, and, by extension, modes of social identification, are defined and determined by an individual's connection with named places and named geographic landmarks.

Superficially, the connection between social identity and a named location might mirror the language of nations and nationalities, such that “Canadians” are individuals who live within a named country called “Canada,” and Germans are individuals who live with other people in a bounded nation called “Germany.” However, the key difference for Indigenous Andeans is the centrality of kinship and kin-making practices in linking people with places and constituting forms of social personhood and social identity. Across the Andes, named spaces are non-human or more-than-human entities. This ontological status of named spaces also elevates them as equal participants within kin networks and kin-making practices for people who live and dwell within them (de la Cadena 2015). Much like modes of dwelling and cohabitation that make houses social persons within kin networks (Alderman 2021; Narayanan 2023), named places and named communities become kin through ritual feeding practices to the land, *pachamama* (“Mother Earth”), and to the *apus* (Gose 2018; Salas Carreño 2016).

On one level, the exchange of substances with the landscape ensures the maintenance and health of crops and domesticated herds of sheep and camelids like llamas and alpacas (Jennings and Bowser 2009). Yet at a more fundamental level, ritual feeding, and other kin-making practices like food sharing, cohabitation, and dwelling, are central to the construction of the social personhood of individuals within the Andes (Allen 2002; see also MacLachlan, this volume). The power of food sharing and cohabitation is key to understanding kin-making practices with human nonkin, such as new brides (Van Vleet 2008), or through caring and adopting children (Weismantel 1995). The time that is spent in the same home and residence, and the relationships forged through sharing food and drink, are all part of a process described by Leinaweaver (2007) as *acostumbrarse*, where nonkin over time are slowly made into kin through coresidence, food sharing, and participating in the daily practices that constitute kinship and social personhood. However, the significance of such practices extends beyond distinguishing kin from nonkin. Across the Andes, kinship is not only about who one is related to, nor the individuals with whom an individual engages in relationships of reciprocity and obligation. Kinship is also about the construction of a social identity,

where the relationships that an individual maintains over the course of their lifetime through kin-making practices of food sharing, cohabitation, and dwelling shape their identity (Canessa 2012; Leinaweaver 2019; Salas Carreño 2019). Because such kin-making practices extend to more-than-human entities like named communities, places, and geographic landmarks, such features and spaces in the landscape also become central in defining social identities for individuals. Social personhood and social identity, in other words, are derived from the name of a community or named location with which one has engaged in life-long kin-making practices. This also means that social difference is defined by the differences and boundaries that distinguish different communities and named spaces in the landscape.

Language, Place, and Social Identity in the Peruvian Altiplano

Today, *puneños* are proud of both their multilingual heritage and multilingual identity within the Peruvian Andes. Over the course of my fieldwork, I heard *puneños* of different Indigenous linguistic backgrounds and generations say on numerous occasions, “Everywhere else they speak two languages, but in Puno we have three.” This mention of “three” refers to the presence and continued maintenance of two Indigenous languages (Quechua and Aymara) and Spanish. The maintenance of two Indigenous languages within the region and at the Departmental level contrasts with other areas in the Peruvian Andes, where there is only one Indigenous language spoken and recognized with Spanish. Yet this declaration of Puno’s Indigenous multilingual status obscures two significant aspects of the relationship between language, identity, and how they are located across the landscape.

The first is how Indigenous multilingualism is distributed in the region. Although Puno overall is multilingual, this view quickly breaks down to more localized forms of bilingualism or Indigenous monolingualism throughout the region. The main urban centers, Juliaca (the primary commercial capital) and the city of Puno (the regional capital), are spaces of inter-Indigenous multilingualism. However, outside of these two urban centers, the Department of Puno primarily consists of provincial towns and municipalities, each populated with different named communities that are associated with only one Indigenous language—either Quechua or Aymara. Thus, what one finds across the *altiplano* are contiguous swaths of communities and named spaces that are affiliated

with only one Indigenous language, with notable transitions between Quechua- and Aymara-speaking communities found in the regional capital of Puno, along the border between Taraco and Huancané,⁴ and farther into the lowland valleys between Sandia and San Juan del Oro. Yet in this geographic distribution is a pattern where language is one set of practices among others that are affiliated with, and characterize, a named place. This means that language, conceptualized as the communicative practices and repertoires that shape a speech community (Mannheim 2022), are part of a broader set of practices like dress, food preparation, and rituals which constitute the boundaries and identities of named places.

Second, although individual communities and named locations are affiliated with only one Indigenous language that forms the base of that community's distinct set of communicative practices, "language," as a named, bounded, ideologized object, is not traditionally used as a primary identifier by individuals. This means that, typically, Indigenous *puneños* do not self-identify, or recognize social difference, in terms of ethnolinguistic labels like "Quechua" and "Aymara." As described earlier, social personhood and social identity are rooted within a named location and are relationships that are cultivated over a lifetime of kin-making practices. Rooting one's identity in a place also emphasizes a sharing of essences, where an individual's identity is also determined by the essences and qualities associated with a named location. Thus, the communicative practices and linguistic repertoires associated with a named location do not define the identity of the individual. Rather, language is another kind of embodied practice that characterizes a place, shapes the essential qualities that define individual identity, and mediates kin-making practices between human and more-than-human kin.

The absence of using a named language in determining social identity and social difference can be traced in the discursive practices associated with self-identification in the *altiplano*. Typically, in Puno, when asking about who an individual is, it is quite common to approach this information by asking where that individual is from in either Quechua (*Maymantaq kanki?*) or Aymara (*Kawkin saraktati?*). However, those questions do not have the same equivalence in English, where asking where an individual is from is asked with the intention of soliciting where an individual is traveling from, or to figure out if that individual

4. For more on the linguistic contact between Taraco and Huancané, see Moya (2013).

might have some heritage or ancestral connection with another place (i.e., asking first- or second-generation immigrants within the United States where they are from, but wanting to know where they are “really” from). Instead, such questions in Puno are inquiries that attempt to locate that individual within a specific named place, and thus identify that individual with the shared essences, kinship, and embodied practices that they share with human and more-than-human entities of that place. This fact is best illustrated through an appropriate response to such questions, where in Puno one would typically say “I am *X*” in Quechua, Aymara, or Spanish. Thus, in Spanish, for instance, a response of *soy puneña*—which in the *puneño* context means “I am *puneña*”—is not only a statement of an individual’s residence within Puno, but also a declaration of their identity as defined and shaped by the collective essences and embodied knowledge that they share with other people affiliated with the named location of Puno. These responses, moreover, emphasize the autochthonous nature of each set of human and more-than-human relations associated with a named place. This means that each location has its own specific identity that can be contrasted with the autochthony and identity of individuals from other named places (Mannheim 2022).

Such conceptualizations between place, identity, and social difference remain important for *puneños* today, regardless of their Indigenous linguistic heritage or proficiency. Ethnographically, the persistence of these connections becomes salient in two specific cases that I encountered over the course of my fieldwork. The first can be found in the identification practices of older, married, or widowed women who primarily live in rural areas in Puno. Typically, preferred marriage alliances in the *altiplano* are exogamous and patrilocal. This means that marriage partners generally come from different communities, and women are expected to move into their husband’s house and natal community. Much like similar cases of marriage and exogamy in the Amazon (Vilaca 2016; see also see McLachlan, this volume), marriage in the *altiplano* is gendered as female, where women are marked by their status as nonkin and outsiders (Harris 2008). But brides do not remain as nonkin or outsiders for long, and over time they are transformed through years of cohabitation, food sharing, and other practices of *acostumbrarse* to become kin and community members. In addition to learning how to embody the practices that define one’s membership and relationality with a specific kin network and place, which includes speech and communicative practices, these women adopt the identity of their husband’s community. This form of social transformation often came up in my conversations with older

women in the city of Puno. During our talks, many would mention the specific community that they were born in. However, when it came to how they identified, most of these women would often name their husband's community as their own, reflecting the transformation to their social personhood and identity that comes with marriage and learning to become kin with their husband's family, community members, and community.

The second site that also sheds insight into the centrality of place in the essentialization of identity and social difference comes from how younger Indigenous *puneños* living in urban cities like Puno and Juliaca are identified. These children and youth are part of an increasing demographic of young people whose parents migrated to these two centers from their natal rural communities for economic and educational opportunities. Most of these youth, who were the children of my primary interlocutors, could tell me where their parents were from because of frequently returning to these places to partake in important festivities and rituals, and to help with the harvest and cultivation of crops. Yet despite these connections, these youth never self-identified with their parents' natal communities, opting for an identity that was tied to either Puno or Juliaca. Additionally, neither their parents nor other adults in their lives identified these youth with a rural or provincial community. Instead, for these adults, who also resided in Puno or Juliaca, their children were essentialized as *puneños* or *juliaqueños* because of their primary upbringing, residence, and sharing of substances with urbanized centers like Puno and Juliaca.

These patterns highlight several important points about place and personhood in the *altiplano*. First, social identity and social personhood are not qualities that can be inherited. Instead, they are acquired and formalized over a lifetime of kin-making practices with a place (Allen 2002). Moreover, traits and characteristics that are associated with a specific place, such as language and communicative praxis, are not assumed to be transmitted intergenerationally (Mannheim 2022), but, rather, are also seen as acquired through sustained kinship and kin-making practices with a place and the people who reside there. Second, personhood and social identity are also fluid, where individuals can acquire or lose different place-based identities over their lifespan depending on shifts in where and with whom they are engaging in kin-making practices (Canessa 1998). Processes like *acostumbrarse*, which are central to kin-making processes, are also important in enabling the fluidity that accompanies the transition and transformation of nonkin into kin. Lastly,

and perhaps most importantly, language, both in its denotational sense (Silverstein 1998) and in its status as a predefined ontological object (Makoni and Pennycook 2005), does not play a role in determining or constructing older epistemological understanding of social identity or social difference. In other words, knowing a place and the people and practices associated with that location is the primary modality of recognizing social difference between Andean Indigenous communities. Language, speech, and communicative practices are important factors in shaping one's connection to a place, but they are secondary to defining social personhood and social difference.

Above, Below, and the Discursive Relationships between Communities

Named places are central to shaping Indigenous identity and social difference. And although language is part of a broader set of characteristics, practices, and qualities that grants a named place its specific autochthony, neither language nor linguistic difference is central to defining a set of social identities or social differences. This relationship between language, place, and social identity also shapes traditional modes of discursively representing the relationship between different communities. Just as individuals are not defined by the language and set of communicative practices associated with any named place, so too are the relationships and differences between autochthonous named places. Instead, differences between named communities and places are discursively represented through elevational differences. In my conversations with my interlocutors, many speakers in the urban capital of Puno would frequently prefer to use Spanish relation terms like *arriba* ("above") and *abajo* ("below") to describe these differences, often using these terms within conversational stretches in either Quechua or Aymara. Like pre-Columbian modes of discursively representing elevational contrasts, the use of terms like *arriba* and *abajo* provides insights into the persistence of elevational difference as one primary axis to categorize, understand, and describe significant differences between communities and, by extension, social differences between individuals.

During my fieldwork, I noted that many of my older Indigenous interlocutors almost exclusively described the location of places and communities in the landscape through these terms, and not through cultural or linguistic particularities. Moreover, such practices were not solely the result of having to answer the queries of a foreign anthropologist.

Throughout my fieldwork, I noticed that Indigenous *puneños*, especially adults, enjoyed discussing with one another the various named places that they knew or had been to with their friends and acquaintances. In casual conversations, individuals enjoyed sharing details about their home communities, and the time that they spent in specific named locations to cultivate crops, fish, or herd domesticated animals. Some would also gossip about their various affines, and the places these individuals originated from. Even more commonplace was to talk about places in relation to hosting specific festivals, parties, and significant religious events. This was especially true of the Indigenous market women I spent time with in the regional capital of Puno, who not only spent considerable amounts of time returning to their own natal communities to participate in patron saint day festivals and rituals, but also enjoyed attending and partying in festivities hosted by the communities associated with distant kin or close friends. These kinds of conversations form the basic discursive and communicative field for Indigenous *puneños*. And in all these discussions, places and people were described and identified not through the language they spoke or other cultural practices. Instead, they were discussed and identified relationally on the landscape through terms like *arriba* and *abajo*.

During my preliminary fieldwork in Puno, I was initially confused by these terms, what they referred to, and how extensively they were used to describe the relationship between a multitude of things that ranged from the geographic placement of communities to where one might find Quechua or Aymara speakers. But this slowly began to change once I started my continuous fieldwork in the region, where the significance of *arriba/abajo* as an axis of geographic and social difference became salient in one conversation I had with Señor Abelardo. Señor Abelardo was an older, Aymara-speaking man in his mid-sixties, who was born and raised in the province of Moho, located on the northeastern shores of Lake Titicaca close to the border with Bolivia. Even though Señor Abelardo lived in the regional capital of Puno for work and for his children to attend school in the city, he would frequently return to his natal community to visit family and friends, and to help cultivate crops in his ancestral fields. I would visit him often to practice my conversational Aymara and to get help with translating some of my Aymara interviews and recordings. One day, our conversation turned to his natal community, at which point he began to list in rapid succession the significant communities near where he grew up, and how he was connected to each one of them through different kin relationships. At some point, he noticed I had a

confused look on my face. He paused, then grabbed a small cushion on the sofa that we were sitting on, and restarted his narration of places and people in his natal province. He first pointed to a random spot on the cushion, saying that it was his natal village and the natal village of his father and paternal line. He then drew a line straight down while saying *abajo*, and identified the new spot on the cushion as his mother's community. He continued, creating an imaginary network of connect-the-dots, with each imagined dot relationally described as being *arriba* or *abajo* his natal community.

Señor Abelardo's manner of communicating and illustrating how he understood his natal region and kinship connections both clarified and highlighted the significance of describing people, places, and things relative to whether they were *arriba* or *abajo* to some reference point. At that moment, terms that I had initially thought were interesting direction labels took an additional significance in communicating a broader epistemological understanding of people and places in the *altiplano* landscape. From this, I became interested in tracking the use of *arriba* and *abajo* in describing directionality between communities in the region. Often this came about through asking my interlocutors for directions to get to named communities across the Department of Puno, where I was frequently making plans to visit the communities of my interlocutors' extended kin network. Eager to ensure that I did not get lost, many of my close friends and acquaintances would provide me with instructions for the location of places in terms of *arriba* and *abajo*, hoping that these details would make sure that I reached my destination safely. Some of my closest friends would also draw out for me the location of places in their social world, reproducing a similar kind of engagement with *arriba* and *abajo* that Señor Abelardo once did for me in locating the places and communities that he is connected with. Like Señor Abelardo, such drawings produced a visualization of the landscape that highlighted how elevational differences of *arriba* and *abajo* were also shaped by the location and prominence of named geographic landmarks such as mountain peaks and Lake Titicaca (see Figure 5.1). More importantly, the narratives that accompanied such drawings also included details of where different kinds of speakers, families, kin groups, and even distinct cultural practices such as ritual dances and traditional dresses were located. *Arriba/abajo*, in other words, were not only used to give basic directions, they were also important to locating and comparing social, cultural, and communicative differences within the landscape.



Figure 5.1. A drawing of major communities in Puno. In addition to labeling places according to whether they are Quechua- or Aymara-speaking, the map is drawn to represent the *altiplano* as being situated between the higher elevated mountains as “*arriba*,” and the lower situated Lake Titicaca as “*abajo*.”

Through giving me such directions, my interlocutors helped me learn how to navigate the landscape on my own, knowing not only how to understand directions, but also how to ask for such directions from other people, and know how to competently provide directions to other people using relational terms like *arriba* and *abajo*. Moreover, such drawings, and even passing discussions around directions and the location of places in the landscape, underscored the continued persistence of discursively locating places, people, and things in relation to the broader geographic landscape.

Ethnolinguistic Shifts and Their Impact on Geography and Identity

Although one's connection with a named place is fundamental to the construction of social identity and sociolinguistic difference, such localized forms of differentiation have also coexisted with broader social

collectives. Following the fall of Tiwanaku, the *altiplano* was divided and controlled by different polities that are discussed in the literature as distinct ethnicities, and included named ethnic groups like Colla, Cana, Lupaca, and Pacaje.⁵ These ethnic distinctions were maintained after the incorporation of the *altiplano* into *Tarwaintinsuyu*, and were also recognized and noted in Spanish colonial documents up till the late sixteenth and early seventeenth century (Mangan 2005).

While these groups are discussed as “ethnicities,” it is important to note that none of these ethnic labels designated a one-to-one relationship between an ethnic group and a linguistic variety. The *altiplano* was highly multilingual, and at that time was home to populations that spoke Aymara, Puquina, and other languages of the region. Linguistic differences were spread out across the region, forming what Mannheim (1991) describes as a mosaic linguistic ecology where one would find transitions between languages and linguistic varieties as one moved from community to community. This meant that the areas that belonged to a broader ethnic polity were also multilingual, consisting of communities that spoke varieties of Aymara, Puquina, and other Indigenous linguistic varieties of the region (Bouysse-Cassagne 1986).

I highlight this pre-Columbian view of ethnicity, and the relationship between ethnicity and epistemological understandings of social identity, language, and place, as contrastive with the emergence of ethnolinguistic discourses within the *altiplano*. Indigenous *puneños* are proud of the multilingual heritage of their department and region. That multilingual heritage today, however, has extended to discursively represent the Indigenous linguistic diversity of the region as belonging to distinct Indigenous ethnolinguistic groups (Narayanan 2018). “Quechua” and “Aymara,” therefore, are not only two distinct linguistic-grammatical systems; they are also the basic essence (McIntosh 2005) of two Indigenous, ethnolinguistic groups. This ideological essentialization situates language and linguistic difference as the primary axis of differentiation (Gal and Irvine 2019) in the *altiplano*. Through this, language becomes not only a bounded object, but also one that can be contrasted against other bounded languages to create a linguistic boundary (Irvine and Gal 2000). This linguistic boundary is then extended to other modes

5. My use of “ethnicity” here is following the term as it is used in archaeological and ethnohistorical descriptions of social diversity in the region, which specifically refers to political organizational differences, and their correlation with material culture such as pottery, ceramics, and textiles.

of social differentiation, recursively reproducing the bounded divisions between languages across other social categories and domains. In Puno, therefore, Quechua and Aymara are two distinct languages which are recursively projected onto two distinct groups of speakers, specific political parties, cultural practices, and modes of Indigenous political ideology and social engagement. What I wish to highlight here, however, is that these discourses of ethnolinguistic difference represent a radical epistemological shift for Indigenous *puneños* in how they discursively conceptualize and locate social identity and language within the landscape.

The effects of this shift can be noted in how language and place are situated in the construction of a social identity. In using ethnolinguistic labels like “Quechua” and “Aymara,” language becomes the primary categorical difference that informs other forms of social differentiation. Social identity through an ethnic label becomes an indexical value derived from the bounded difference between Quechua and Aymara as distinct Indigenous languages in the *altiplano*. But in centering language as the primary axis of social identity and social difference, the autochthonous nature of a named location and the centrality of place-based modes of locating and formalizing social identification and personhood through kinship and kin-making practices are epistemologically deprivileged or obscured. This means that distinct spaces are not regarded for their local particularities, but instead are treated as undifferentiated swaths of geographic space and territory that are brought together through sharing a single Indigenous language and group of linguistically and socially homogeneous speakers.

Absent from this relationship between language, social identity, and place are the granular, microforms of differentiation and localization that are important to place-based modes of social identity and difference. This absence, for instance, can be seen in the discursive territorialization of the *altiplano*, which is commonly divided into the *zona Quechua* (“Quechua zone”) and the *zona Aymara* (“Aymara zone”). When used conversationally, these phrases project language onto large swaths of land. What they do not do, however, is mention or recognize any specific named place, location, or geographic landmark of note within these spaces, presenting such zones as undifferentiated spaces that are held together through a common language, instead of recognizing each space as a distinct place with a distinct people, regardless of whether they speak the same Indigenous language or not.

A more subtle consequence of this shift can be found in the visualization and representation of the landscape and relationship between

communities and named places. In place-based modes of locating and identifying social differences, distinct places are differentiated through relational terms like *arriba* and *abajo*. Locating places in terms of “above” or “below” emphasizes deeper histories of interactions between communities at different altitudes. But these terms also present a three-dimensional, topographical understanding of the landscape and the beings, qualities, and characteristics contained within it. In other words, place-based modes of locating social differences, and describing those differences relationally as being “above” or “below” each other, require an understanding of a landscape in terms of topographical change that is grounded by named communities, their peoples and practices, and significant geographic more-than human entities and kin. The landscape that is represented by ethnolinguistic labels, however, flattens this topographic view of the region, discursively projecting people onto spaces that resemble geographic images on two-dimensional maps.

This flattened understanding of place, the people within it, and how those spaces are defined by language boundaries bears many resemblances to the imagined boundaries of nations (Anderson 1983). Yet within the Andes, this flattening has deeper colonial roots, hearkening back to Iberian colonial linguistic practices which naturalized the links between language, territory, and speakers (Woolard 2004) and formalized Indigenous languages as legitimate linguistic objects and vehicles for knowledge transmission and communication (Veronelli 2015). Such epistemological shifts, thus, do not only change how language is conceptualized and discursively used to construct new social identities. They also represent a radically different view of the landscape, altering how communities, populations, and the languages that they speak are situated in relation to each other.

New Semiotic Configurations for Language, Identity, and Landscape

For much of the history of the *altiplano*, identity was grounded in place: conceptions of self, personhood, and other social relations were based within specific locales that individuals had cultivated a lifetime of relationships with. Language and linguistic differences—while essential elements of embodied knowledge and practice that aid in the construction of a locally defined social personhood—are indexically linked to a place and are only part of a broader set of cultural practices associated with defining a named place and social identity. Named communities

and places, therefore, are the semiotic ground that social and cultural practices index. Linguistic and communicative practices are one of these indexical practices, which, when enacted and embodied over a lifetime along with other kin-making practices, create that essentializing link between an individual's social identity and social personhood with a named place.

By contrast, language-based modes of ethnolinguistic differentiation make language the primary semiotic ground from which Indigenous social identity and difference are derived. This means that ethnolinguistic identity is indexically linked to a specific Indigenous language: Quechua or Aymara. These speakers are then projected onto distinct spaces in the landscape. Such regions are treated as homogeneous swaths of territory united by an equally homogeneous set of Indigenous language speakers of one bounded Indigenous language. In this semiotic configuration, therefore, knowing the landscape does not rely on recognizing or knowing the specifics that define the boundaries between places and spaces. Instead, those differences are all subsumed under a broader language label, marking it as part of a bigger geographic region affiliated with ethnic, Indigenous "Quechuas" or "Aymaras."

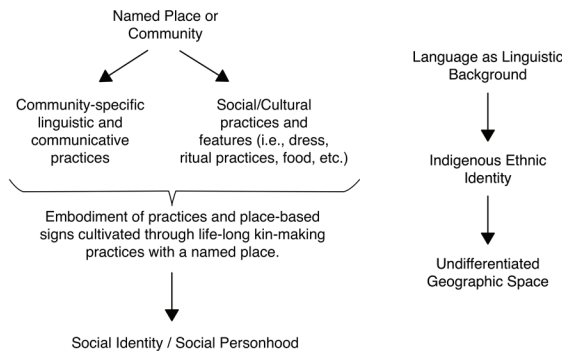


Figure 5.2.

Through this semiotic reconfiguration, the relationship between language, place, and identity is inverted (see Figure 5.2). By centering language and linguistic difference as the primary axis of geographic and social differentiation, social identity is conceptualized through Indigenous ethnic identity instead of being cultivated through locally defined processes of kinship and social personhood. And because of this shift, one

can use ethnolinguistic labels, like “Quechua” or “Aymara,” without making explicit reference to where people are specifically from in the *altiplano*. Such details must be additionally provided since the spaces that are associated with ethnolinguistic Quechuas and Aymaras do not point to a specific named place or community. This also means the autochthony that is inherent with each named community is diminished as it is subsumed under these ethnolinguistic labels, which in turn also reduces the importance of social differentiation at a more local, community-based scale.

Throughout this chapter, I have carefully outlined how this semiotic reconfiguration alters the epistemological orientation towards the local landscape and social identity. Yet more significant are the ways that local epistemologies and ontological understandings of what language is also change through this epistemological shift. Under place-based modes of deriving social identity and social difference, language is conceptualized as part of a broader set of place-specific communicative practices that, when embodied and cultivated through kin-making practices with human and more-than-human kin, also cultivates the social identity and social personhood of an individual. This autochthonous view of language contrasts with how it is framed in ethnolinguistic discourses, which do not treat it as a set of community-specific communicative practices. Instead, language is ideologized as a bounded object. But this bounding does more than map a specific linguistic variety onto a specific set of speakers and people who are inscribed into spaces on the landscape. It also bounds linguistic and communicative practices in ways that might not otherwise be seen as belonging to a specific named object. Such inventions of language (Makoni and Pennycook 2005) often lead to subsequent ideological processes of linguistic purism (Kroskrity 1998), thus changing the ways that speakers orient towards language, linguistic difference, and Indigenous communicative practices more generally. Yet what I wish to stress here is that such ideological processes and perspectives are the result of (i) a transformation of language’s status in the *altiplano* and (ii) an epistemological and semiotic shift that reconfigures the relationship between language, social difference, and the status of named places and spaces in the local landscape.

Conclusion

Both modes of knowing and understanding language and social difference in the landscape—place-based modes and ethnolinguistic

nationalist representations—are copresent in the *altiplano* today. To varying degrees, the two frames of orienting and locating language and social difference in the landscape are used by Indigenous *puneños* of both Indigenous linguistic backgrounds and across generations. But the non-commensurability between these epistemological modes of knowing the landscape has significant impacts on the future of Indigenous linguistic praxis and multilingualism for younger Indigenous *puneños* of Quechua- and Aymara-speaking heritage. Boundary-making processes that seek to distinguish linguistic, social, and cultural elements as either “Quechua” or “Aymara,” for instance, are one consequence of this shift, placing ethnolinguistic boundaries around communicative and cultural practices that in the past were defined by named communities.

Yet a more consequential change from the increasing social and political dominance of an ethnolinguistic view of language, social difference, and place is how such ethnolinguistic discourses and forms of identification do not require linguistic knowledge or fluency in Quechua or Aymara. This is mostly noticeable among younger Indigenous *puneños*, who often self-identify as ethnic “Quechuas” and “Aymaras” even though they are primarily dominant in Spanish. Such practices highlight how ethnolinguistic labels do more than simply project language onto bounded populations and bounded places. Ethnolinguistic designators frame language as an abstract set of grammatical rules that do not necessarily have to be embodied by a community of speakers. Thus, when Indigenous *puneños* discursively use labels like “Quechua” and “Aymara,” they are using a form of identification that indexes a distinct, named, bounded grammatical system, regardless of their own knowledge of how those grammatical systems are used in interaction, or the degree to which those grammatical forms are incorporated into their own daily communicative praxis.

This kind of disconnect between embodied linguistic knowledge, social identity, and social difference is absent from place-based modes of understanding social difference as it is located in the landscape. To be from a place, or, rather, to be that place, means to embody the practices that unite others and ground them within that named place and location. Speech and communicative practices are part of the place-specific embodied practices and knowledge set that constitute social identity and social differences across the *altiplano*. Just like being from a place means engaging in kinship with others associated with it, it also requires one to speak like that place. Discourses of ethnolinguistic differences do lend Indigenous communities across the *altiplano* and Andes a kind

of legitimacy and recognition on a global scale. Those discourses, however, change how *puneños* think about and understand Indigenous identity in relation to places and embodied forms of linguistic and cultural knowledge and practices. Such changes affect how social and linguistic differences are placed in the landscape, and, in the long term, influence how Indigenous linguistic knowledge and Indigenous multilingualism are maintained.

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CHAPTER 6

Linguistic Evidence for Body Parts as the Locus of Learning in Matses

David W. Fleck

This chapter explores the ways in which the Matses Indians of Amazonian Peru express the concepts of learning and teaching in their language. Of particular interest is that in the Matses language any utterance referring to learning or teaching is necessarily linked to a body part (including sense organs, like the eyes and ears), but never to the brain (or heart or other internal organs). This linguistic requirement derives from the fact that the lexicon has only one verb that means “learn” (*kiad*) and one verb that means “teach” (*kiak*), and these verbs must be preceded by a prefix that designates a body part to be grammatically acceptable, as illustrated in example (1).¹

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1. The orthography used in this chapter is phonemic. In the following phoneme inventory, International Phonetic Alphabet symbols are enclosed in square brackets where these differ from the practical representation and significant allophones are described in parentheses: a, e, ě [i], i, o, u, p, t, k (= glottal stop syllable-finally), b (sometimes pronounced with some friction intervocalically), d (= flap intervocalically), m, n (= velar nasal before k, bilabial nasal before p and b), s, sh [ʃ], ʃh [ɕ], ts, ch [tʃ], ɕh [tɕ], w, j. Basic forms, rather than conditioned allomorphs, are used in the examples. Morpheme gloss abbreviations: 1 = First Person; 2 = Second Person;

- (1) *Kun chichi-n uitsun daëdka-kin*
 IGEN grandmother-ERG wristband weave-while:A/S>A
më-kiak-o-şh-i.
hand-teach-PAST-1O
 “My grandmother taught me to weave wristbands.”
 Lit. “My grandmother hand-taught me to weave wristbands.”

The present study will primarily explore the semantics and grammar of these verbs with the goal of obtaining insight into how the Matses language reflects the Matses’ interpretation of the learning processes of acquiring knowledge and skills. In particular, it will lead to the conclusion that the Matses consider learning and teaching to be associated with body parts.

Following the assumption that the lexicon of a language is both a product and a shaper of speakers’ culture-specific ways of thinking, the present study will also take into account the semantic range and usage of the only other lexeme in the language associated with knowledge, namely the verb *tantia* “know, understand, believe, remember, hear,” and so on, to determine if there is any evidence contradicting the assertion that for the Matses, body parts, rather than the mind, are the locus of learning. Indeed, while the Matses language does have a word for “brain” (*mapiducquid*, literally “what is inside of the head”), it lacks a word for the concept of “mind.” The concept of energy, however, is prominent in the Matses belief system, and the ways that several types of personal energy can be transferred between humans may provide some insight into how the Matses understand the transfer of knowledge.

3 = Third Person; A = Transitive Subject; ABIL = Abilitative; ABS = Absolutive; ACT = Action; ADVZR = Adverbializer; AUG = Augmentative; COL = Collective; DIST.PAST = Distant Past; ERG = Ergative; GEN = Genitive; IMPER = Imperative; INCEP = Inceptive; INDIC = Indicative; INST = Instrumental; INTENT = Intention; INTR = Intransitive; LOC = Locative; NEG = Negative; NOMZR = Nominalizer; NPAST = Nonpast; O = Transitive Object; PL = Plural; s = Intransitive Object; TR = Transitive; vZR = Verbalizer; > = interclausal argument tracking (subordinate to matrix).

The Matses and the Matses Language

Matses is a language in the Mayoruna branch of the Panoan linguistic family (Fleck 2013). It is spoken by approximately four thousand speakers in Amazonian Peru and Brazil in the valley of the Javari River. The Matses were peacefully contacted for the first time relatively recently (in 1969, by American missionaries), and most Matses continue to practice traditional subsistence strategies (hunting, fishing, swidden horticulture, and harvesting of wild plant foods) in their remote rainforest territory. Due to their relatively recent isolation and maintenance of their traditional culture, their language is one of most vital in Amazonia. All Matses children who live in the Matses territory learn Matses as their first language, most elderly Matses are essentially monolingual in Matses, and while most young adults speak Spanish or Portuguese, they do so with some difficulty. In the mid-1970s, missionaries introduced Western education to the Peruvian Matses, but only reading, writing, and arithmetic, and only in the Matses language. It was not until the 1990s, when the Peruvian Ministry of Education took over the Matses' education program using the national curriculum, that Matses children were introduced to Western scientific notions, such as the anatomical function of the brain. As such, it can be maintained that the Matses language and ways of thinking continue to be essentially unaffected by Western society, especially with respect to the older generation, who provided most of the data upon which the present study is based.

Methods

This chapter is based on a long-term study of the Matses language (1998–), the products of which include a comprehensive grammar (Fleck 2003) two dictionaries (Fleck 2020; Fleck, Uaqui Bëso, and Jiménez Huanan 2012), a Matses history book (Jiménez et al. 2014), numerous pedagogical materials, and multiple linguistic articles, the most relevant for the present study being on Matses body-part prefixation (Fleck 2006). Natural speech data were drawn from an electronic database of sixty-four hours of audio recordings with transcriptions and translations (Fleck 2014). Additionally, for the purpose of the present study, I elicited further linguistic data and conducted ethnographic interviews with Matses elders in 2020 and 2021 at the village of Nueva Primavera. I have been living permanently in a Matses village in Peru since 2008, so I have

also been able to draw upon my personal experience with the way the Matses talk about learning and teaching in their language.

The Grammar of Body-Part Prefixation

Body-part prefixation is a prominent grammatical feature in the Panoan language family. Most Panoan languages have a closed set of approximately thirty monosyllabic morphemes that can be used instead of full body-part nouns, prefixed to verbs, nouns, and adjectives. With the exception of *ně-* “liquid, fire,” these prefixes all refer centrally to human/animal body parts, generally with extended meanings referring to parts of plants, dwellings, artifacts, bodies of water, terrain, and so on. While the prefixed forms are obviously related to body-part nouns, in the Panoan languages in which this grammatical feature has been investigated in detail, it is clear that, synchronically, the prefixes have a semantic range distinct from and generally more ample than formally similar body-part lexemes in the respective languages, and therefore cannot be analyzed as truncations or allomorphs of body-part nouns.² These prefixes cannot be attached to all verb, noun, and adjective roots, and there are a small number of roots that cannot occur without a prefix, as is the case with the Matses verbs that are the focus of this chapter. Table 6.1 summarizes the meanings of the twenty-eight Matses prefixes, with body-part semantics listed first. As can be seen in the table, there are many more body-part nouns than there are body-part prefixes; however, there is no body part that cannot be referred to with a prefix.

Learning and Teaching Verbs

In Matses, there are no ambitransitive verbs: that is, all Matses verbs are grammatically classified as transitive or intransitive. Grammatically transitive verbs are those that occur with an ergative-case-marked subject and can head a clause that has a direct object argument, while

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2. For details of this analysis of body-part prefixation in Panoan languages, see Fleck (2006) for Matses; Zariquiey Biondi and Fleck (2012) for Kashibo-Kakataibo; Rodríguez Alzza (2017) for Iskonawa; Fleck (2018, 2023) for Shipibo; Barbosa (2021) for Matis; and Fleck (2022) for Marubo.

Table 6.1. Complete inventory of Matses body-part prefixes.

Prefix	Gloss of prefix
<i>an-</i>	mouth; tongue; palm (of hand); sole (of foot); (arm)pit; gill slits (of fish); swampy depression in the ground; cavity; concave surface; interior; underside; center (of path or stream)
<i>bě-</i>	face; forehead; eye; eyebrow; front; surface
<i>da-</i>	torso; (tree) trunk; stem; (arrow) shaft; outer surface; perimeter; side
<i>dan-</i>	knee; back of leg opposite the knee; kneecap
<i>dě-</i>	nose; beak; bill; (nose) septum; nose cartilage; tip; prow; (house) gable
<i>ěk-</i>	lips; labia (of vulva); edge of round thing or opening; mustache
<i>in</i>	tail; tail fin; penis
<i>ka-</i>	back; dorsal fin; back scent gland; lower back muscles; roof; bow back; (canoe) keel; convex surface
<i>kui-</i>	jaw; edge; gunwale; riverbank
<i>kuis-</i>	thigh; back of thigh; front of thigh
<i>ma-</i>	head; brains; (human) head hair; fontanel (soft spot of baby's skull); top; blunt end of single-bit ax head; paddle handle; apex of roof; egg; fruit; ground surface
<i>mě-</i>	hand; forearm; wrist; projecting carpal bones; elbow; finger; knuckles; fingernail; branch; (tobacco-pulverizing) mortar
<i>nak-</i>	abdomen; half
<i>ně-</i>	liquid; fire
<i>nik-</i>	navel; anal fin; ventral fin; diaphragm; undeveloped eggs and egg-making organ of bird/reptile
<i>pa-</i>	ear; antler (of deer); horn (of cattle); fin spine (of catfish); edge of swidden; pot handle
<i>pan-</i>	temple; part of cheek near sideburns
<i>pě-</i>	arm; upper arm; front leg; lateral muscles (that connect back to shoulder); wing; wingtip (of bird); winglike pectoral fins of a stingray; feather; leaf; frond; branch
<i>po-</i>	abdomen (of person or erect animal); belly; abdomen skin/flesh; stomach/intestines; belly; trunk swelling (of palm tree); halfway up (e.g., of tree trunk or a hill)
<i>šha-</i>	crotch; pelvic lymph node; marsupium (opossum pouch); crown (of tree or palm); new unopened palm frond

Prefix	Gloss of prefix
<i>shĕk-</i>	tooth; (crab) pincer; dental cavity; arrowhead; spearhead
<i>shik-</i>	chest; ribs; sternum; breast; cleavage; house rafters; keel (of bird or some fish)
<i>ta-</i>	foot; ankle; projecting tarsal bones; toe; toenail; root; stilt root; buttress root; base
<i>tak-</i>	underside (of four-legged animal); bow belly
<i>tan-</i>	cheek (of face); inside of cheek
<i>tĕ-</i>	neck; vocal sac (inflating air sac on throat of male frogs/toads); trachea; crop (of bird); mane (of tapir or horse); wattle (of guan or turkey); crownshaft (of some palms); foreshaft (of arrow); sheath (of palm frond); peduncle ("fruit branch" of palm)
<i>tsi-</i>	butt; vulva; anus; cloaca (of birds, reptiles, amphibians, and fish); everted clitoris (of monkey); scorpion stinger; pelvis; place where backbone joins pelvis; front of pelvis; coccyx (human tailbone); short tail of some mammals; testicle; arrow notch; end; (boat) stern; (gun) stock
<i>wi-</i>	lower leg; shin; shin bone; calf; buttress root; base of tree trunk

grammatically intransitive verbs head clauses that have a single argument (the unmarked intransitive subject). While object and subject can be optionally omitted from a clause, the transitivity class of a verb is confirmed by "transitivity agreement," a grammatical feature whereby adverbs and adverbial clauses end in enclitics that agree with the transitivity of the main verb (see Fleck 2010). Consequently, a large proportion of Matses verbs occur in semantically related transitive–intransitive verb pairs (e.g., *nika* "to chase away" vs. *nike* "to run off"). Unpaired verbal lexemes must undergo valence-increasing (causativization, applicativization) or valence-decreasing (reflexivization, passivization, antipassivization) derivation before occurring in transitive or intransitive clauses, respectively.

In most instances, transitive–intransitive verb pairs are formally similar, such that it is tempting to analyze such verb pairs as synchronic derivations of the same lexeme; however, properties such as indeterminable direction of derivation, semantic incongruity, and/or lack of a productive suffix that matches the end of the verb would make such parsings at best diachronic hypotheses. The verbs *kiad* "learn" and *kiaċ* "teach" fall into the category of formally and semantically related transitive–intransitive

verb pairs. While the /ad/ ending on *kiad* matches the productive reflexive/passive/anticausative suffix *-ad*, there is no synchronic valence-adjusting suffix *-ak* in the language, and there is no verb in the language with similar semantics having the form *ki*, *ke* (/e/ is raised to /i/ before /a/ at morpheme boundaries) or *kia* (identical vowels fuse at morpheme boundaries). In short, while *kiad* and *kiak* most likely evolved from a common origin, synchronically they are clearly separate lexemes.

The verbs *kiad* and *kiak* are obligatorily prefixed with one of the twenty-seven body-part prefixes listed in Table 6.1 (they do not occur with the twenty-eighth prefix, *nē* “liquid, fire”): that is, they cannot occur in natural speech without a body-part prefix. Table 6.2 lists some of the possible meanings produced by the combination of these verbs with the body-part prefixes with which they are most frequently used.

Table 6.2. Sample of meanings of verbs formed by combining *kiak* and *kiad* with body-part prefixes.

Word	Morpheme gloss	Word gloss
<i>an-kiak</i>	mouth/tongue-teach	teach to talk, to recite the alphabet, to whistle
<i>mē-kiad</i>	hand-learn	learn to shoot a bow or gun, to write, to fight
<i>bē-kiak</i>	eye-teach	teach to read, to identify medicinal plants
<i>ta-kiad</i>	foot-learn	learn to walk, to cross a log bridge, to play soccer
<i>pa-kiak</i>	ear-teach	teach to understand a foreign language, to identify an animal vocalization
<i>dē-kiad</i>	nose-learn	learn to recognize the scent of an animal

As can be observed in Table 6.2 (especially clearly with *pa-kiak*), body-part prefixes always refer to a part of the body of the absolutive argument (i.e., the intransitive subject or the transitive object) and never to the transitive subject. Therefore, the body part that is referred to belongs to the learner and not to the teacher. The following examples taken from recorded narratives illustrate the use of these verbs in sentences.

- (2) *Aṣhik an-kiad-onda-bi piktṣëk.*
 then:INTR **mouth-learn**-DIST.PAST-1S small
 “Then, I learned to talk [in Spanish] a little.”
- (3) *Nid-onda-bi bata ṣhubu-wa-ṣhun*
 go-DIST.PAST-1S tree.type hunting.blind-vZR:make-after:S/A>A
se-ek mibi mē-kiak-nu nid-Ø,
 shoot-while:S/A>S 2ABS **hand-teach**-INTENT:1 go-IMPER
mado ka-ak.
 son tell-when:O>S/A
 “I went, when he told me: ‘Let’s go to teach you how to shoot [ani-
 mals] after making a hunting blind by a *bata* tree, son.’”

While the prefixes in Table 6.2 are the ones most commonly found in the text database and in overheard conversations with the “learn” and “teach” meanings of these verbs, *kiad* and *kiak* can be used with any of the twenty-seven body-part prefixes, although such combinations can be unusual or facetious. For example, I overheard a girl tease her younger male cross-cousin with the following statement:

- (4) *Cho-Ø, mibi in-kiak-nu.*
 come-IMPER 2ABS **penis-teach**-INTENT:1
 “Come, I will teach you to have sex.”

It is important to note that the body-part prefix never refers to an instrument, with any verb. For example, the stem *mē-te-ad* (hand-paint stripes-reflexive) can mean “paint stripes on one’s own hand,” but not “paint stripes on oneself with/using one’s hand.” The prefix always refers to the body part that is affected. Grammatically, however, the direct object of the clause is the possessor of the body part, and the body part serves to specify the part where the person, animal, and so on, is affected: so, *in-kiak* in (4) would be literally translated as “teach you at your penis,” rather than “teach your penis.” One of the features that makes body-part grammar interesting is that body-part concepts are “relational concepts” (Lehmann 2022: 16): that is, unless the part is detached, it is not conceived independent of the whole. Thus, when a person’s body part learns something, by inference the person also learns it. Nevertheless, there is no indication in Matses speech that body parts are only a “window” on “conduct” for learning; if this were the case, it would be expected that statements like the one in (4) could be paraphrased with an instrumental

case marker or an event initiation suffix (Fleck 2010) on “penis.” The fact that such paraphrases are not possible supports the conclusion that for the Matses, learning is located at body parts.

While most internal organs are not referred to with body-part prefixes, the prefix *ma-* “head” can refer to the brain. For example, the term *ma-che* “head-eat without chewing” can refer to eating the cooked brains of an animal. Nevertheless, upon asking if the terms *ma-kiad* and *ma-kiak* can mean, respectively, to learn and to teach a mental activity or to become aware of a fact, Matses informants insisted that they cannot, but rather could mean something like learning/teaching to stand on one’s head, to use a tumpline (strap for carrying a load), and so on.

The conclusion that can be drawn from this section is that the Matses do not talk about learning and teaching with respect to the brain or mind, but rather consider the body part used for the skill to be the locus of learning. Because the direct object is always the person or the animal, it can also be concluded that the body part does not learn independently of the person or animal, but rather the learning is focused at that body part.

Polysemy of *Kiad* and *Kiak*

In contrast to homophony, which may involve formally identical lexemes with unrelated meanings, I use the term polysemy to refer to distinct but related meanings of the same lexeme. In fact, while the meanings may be distinguishable from a Western perspective, some of these polysemous meanings may not be so distinct from Matses speakers’ point of view. In any case, this polysemy can provide further insight into how the Matses think about learning and teaching. Below are listed all the meanings of the verbs *kiad* and *kiak*. Note that with all of these meanings these verbs require a body-part prefix.

kiad “learn”

“get accustomed [e.g., to listen to a shortwave radio despite the static]”

“be infected by an ailment [e.g., catch a cold, get a rash, get conjunctivitis]”

“receive energy [e.g., vigor, marksmanship, shamanic power, weakness]”

kiak “teach”
 “make or help to get accustomed”
 “infect with an ailment”
 “pass on energy”

The meanings of *kiak* are the transitive counterparts of the meanings of *kiad*. The following examples illustrate some of the possible the meanings of *kiak* with the prefixes *ma-* “head,” *dē-* “nose,” and *da-* “body.”

- (5) *ma-kiak* “teach to stand on one’s head,” “make get used to wearing a hat,” “pass on lice”
- (6) *dē-kiak* “help a girl get used to wearing nose ornaments,” “give someone a cold”
- (7) *da-kiak* “pass on a fever,” “transfer vitality/energy using frog venom or tobacco snuff”

The meanings “learn” and “get used to” do not seem to be particularly semantically distant, particularly when considering that they are used with focus on a body part. For example, to learn to use a fork and to get used to using a fork are not disparate notions. Meanwhile, the contagion and interpersonal conduction of energy meanings seem somewhat distinct from learning and teaching. The common semantic element that unifies all of these meanings is the notion of transmission, suggesting that learning and teaching might be viewed by the Matses as the interpersonal transfer of knowledge and skills. This is easily enough stated in English, but it opens the questions of how the Matses perceive interpersonal transfer and whether they recognize abstract concepts like knowledge and skill.

Interpersonal Transmission of Nonconcrete Substances

A closer examination of the Matses notion of energy and how it is transferred between humans might provide some insight into the “learn” and “teach” meanings of *kiad* and *kiak*. Three types of energy are recognized by the Matses. *Sinan* is hunter’s, warrior’s, and shaman’s energy and includes valor, marksmanship, and hunting or fighting ability. *Dayac* can be translated as “hard-worker energy” or “industriousness”

and includes vitality, endurance, and motivation to work. *Winma* is a negative energy and could be translated as “weakness.” Only males can have *sinan*, and it is transferred from a good hunter or warrior to a poorer hunter or warrior through a ritual involving the application of the venomous skin secretion of a treefrog (*Phylomedusa bicolor*) to superficial burns made on the skin, or by blowing tobacco snuff through a bamboo tube into the other man’s nose. The *sinan* of the better man does not diminish when he passes it to another man or to a boy, but if a male with less *sinan* applies the venom or blows the snuff to a man who has more *sinan*, the receiver’s *sinan* will diminish. In the case of a shaman’s *sinan*, it is passed on only to an apprentice by blowing tobacco snuff, and can diminish if the shaman drinks sweet beverages. Both men and women can have *dayac*, but only males can transfer it to males and only females can transfer it to females. It is transferred in the same manner as *sinan*, except for the fact that women do not use tobacco snuff. *Winma* is inherent to women, and can be inadvertently transferred to men if they bathe in the same place where a woman has bathed or have sexual intercourse with a woman who is menstruating. The woman who passes on her *winma* to a man is not affected by the process. Unlike with the other meanings of *kiad* and *kiak*, the “energy transfer” meaning of these verbs occurs only with the prefix *da-* “body.” This is because *sinan* is not centralized in any particular part of the body, but rather is part of a person’s soul/spirit/essence. Below are two examples of the use of these terms.

- (8) *Bakuë-bo uspu-mbo ik-e-k-e, akate-n*
 child-PL lazy-AUG be-NPAST-INDIC-SO frog.venom-INST
se-kin kun dayak da-kiak-nu
 pierce-while:s/A>A IGEN industriousness body-transfer-INTENT
 “The boys are lazy, so I will transfer my industriousness energy to them by applying frog venom to them.”

- (9) *Aton winma-n da-kiad-mane ke-šhun,*
 3GEN weakness-INST body-receive-perhaps say-after:s/A
chido nes-kueded-ak-no nes-tiapi-mbo
 woman bathe-COL-ACT.NOMZR-LOC bathe-NEG.ABIL-ADVZR
ik-e-bi.
 be-NPAST-1s
 “Lest they pass on their weakness to me, I will not bathe where the women bathe.”

The conclusion of this section is that the notions of learning and teaching can be viewed as a type of transfer of knowledge and skills from one person to another, similarly to the manner in which ailments and energy can be transferred from one human to another. One point worth highlighting is that, unlike with giving an object to another person, the “giver” does not lose possession or experience a reduction in the level of the transferred knowledge/skill, ailment, or energy. The next section will explore whether knowledge is in other ways similar to the Matses notions of energy, and whether knowledge is even a recognized concept for the Matses.

Knowledge and Understanding Verbs and Nouns

While, strictly speaking, *kiad* and *kiak* are the only verbs in Matses that express the notion of learning and teaching, there is another verb in the language with related semantics. The verb *tantia* has a very ample semantic range: “listen, hear, understand, know, think, remember, believe.” The notions “understand” and “know” have some semantic overlap with “learn” (example 10), particularly when used with an inceptive suffix (examples 11 and 12).

- (10) *Pia-n* *se-kin* *tantia-e-mbi*
 arrow-INST pierce-while:s/A>A know-NPAST-1A
 “I know how to shoot an arrow”
- (11) *Chotak-n* *onkete* *tantia-ben-onda-mbi*
 non-Indian-GEN language know-INCEP:TR-DIST.PAST-1A
 “I came to understand the non-Indians’ language.”
- (12) *Mua ne-e-k* *ke-kin*
 liar be-NPAST-INDIC say-while:s/A>A
tantia-ben-o-mbi
 know-INCEP:TR-DIST.PAST-1A
 “I realized that he was a liar.”

The verb *tantia* cannot be used with body-part prefixes, nor is it used in association with any body part or internal organ other than the ear. Its wide semantic range is of interest in that there are no other synonymous or more specific verbs that refer to these meanings: that is, there are no

other verbs that specifically mean “hear,” “know,” and so on. The fact that “to know” and “to understand” are not lexically differentiated from each other or from “hear,” “remember,” and so on, suggests that the notion of knowing is not central in the Matses’ understanding of the world. Rather, their use of learning and teaching seems to associate learning and teaching with the transfer of personal energy.

While the energy transfer and teaching processes are analogous, there is no term for “knowledge” analogous to the Matses terms for “energy.” *Tante* is the semantically closest term, but it means “wisdom,” “intelligence,” or “cleverness,” rather than referring to acquired or accumulated information. As explained to me by several Matses elders, *tante* cannot be transferred. Rather, one is born with it or acquires it through a lifetime of experience. Indeed, it is quite difficult to ask a Matses if *tante* can be transferred, since grammatically *tante* cannot be used outside of the phrase *tante chokid*, parsed in (13).

- (13) *tante* *cho-kid*
 wisdom/intelligence/cleverness have-NOMZR
 “wise one, smart one, clever one”

This term is used principally to refer to wise elders, and also to a few animal species considered to be clever, the latter somewhat facetiously.

Having concluded that *tante* cannot be defined as “knowledge,” the next line of questioning, which involved explaining to Matses informants what is meant by *conocimiento*, the Spanish term for “knowledge,” revealed: (i) that there is no Matses noun meaning “knowledge” (although the verb *tantia* can mean “to know”); and (ii) that *conocimiento* is not located in any particular part of the body. The elders did not know what the function of the brain is. There is no term for the Western abstract concept of “mind,” and it was impossible to explain it in terms that they could understand. Rather, they thought I was talking about *mayan* “soul, spirit,” which is not a repository of knowledge or the locus of thoughts, but retains memories and energy after one dies. As such, it could be considered that the meaning of term *mayan* includes a nonlocalized concept of mind, but it is not used to talk about learning, teaching, or possessing knowledge.

A similar situation is found in Kashinawa, another language in the Panoan family:

There is no specific Cashinahua term that may be translated as “knowledge.” The closest equivalent, *unaya*, may be glossed as “with

knowing/learning,” in an active rather than a given sense. In general, linguistic usage in Cashinahua suggests that bodies continuously accumulate the effects of “experiences,” and that what we might seek to treat as “knowledge” is in fact a process rather than a fixed category. (McCallum 1996: 355)

[A] wise man, *huni unaya*, has knowledge throughout his body. ... When I asked them where specifically a wise man had knowledge, they listed his skin, his hands, his ears, his genitals, his liver, and his eyes. “Does his brain have knowledge?” I asked. “*Hamaki* (it doesn’t),” they responded. ... *Una* is that which one’s body learns from experience. (Kensinger 1991: 38–39)

Thus, the notion of the body as the locus of learning/knowledge is not limited to Matses, and may be widespread in the Panoan family. Unfortunately, I have not been able to find any other Panoan ethnographic studies that draw explicit conclusions about the locus of learning or teaching.

Conclusions

While learning and teaching generally involve the brain, they also typically involve other body parts. This is clear with respect to learning physical skills, like jumping or felling trees with an ax, where muscle movement is involved in performing the action, muscle development is required for mastering the skill, muscles may become sore after practicing the task, calluses may form, and so on. However, even mental activities, like understanding a language and doing mathematics, require a sensory organ at some point in the learning process, especially the eyes and ears. The Matses evidently focus on the nonmental side of learning and teaching, and that is reflected in their language.

Considering that the obligatorily prefixed verbs *kiad* and *kiak* are the only lexemes that code the notions of learning and teaching, the Matses language requires the speaker to mention a body part whenever they talk explicitly about the acquisition or transfer of knowledge. Presumably, when the Matses speak, they generally pick the body part unconsciously, in most instances repeating what they have heard many times. Meanwhile, for me, as a second-language learner, when I want to say something about teaching or learning, I sometimes have to stop and think which body-part prefix to attach to *kiad* or *kiak*. As such, this is a

clear example of Quintanilla's observation in this volume that language can affect cognitions, especially in the attention that speakers pay to certain relationships between events in reality. It could be said, then, that the Matses' culture-specific conceptualization of acquisition of knowledge influences the lexicon and grammar, which in turn reinforces and perpetuates the conceptualization.

A comparison with the Matses' notions of interpersonal energy transfer and contagion, which are spoken of using the same lexemes used for learning and teaching, suggests that learning and teaching are considered a type of interpersonal transfer process, despite the finding that they do not have terms or concepts for "knowledge." Meanwhile, they do have a term for knowledgeable people (*tante chokid*), who are very much respected, and the Matses system of grammatical evidentiality is one of the most complex grammatical systems in the world for the linguistic coding of the source of knowledge (Fleck 2007), so it is not realistic to suggest that knowledge and the source of knowledge are not important to the Matses. They simply do not have terms or concepts for the Western abstract notions of "mind" or "knowledge."

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CHAPTER 7

How Language Influences Cognition: The Case of the Quechua Evidentiality System

Pablo Quintanilla

In the last twenty years, much empirical evidence has suggested that natural languages can affect cognition in different ways. In this chapter, I shall claim that, at least in some cases, language can shape cognition by means of affecting the epistemic intuitions of its speakers. I will use as an instance the Quechua evidential system. If this claim is true, we should discuss more thoroughly what philosophers do when they analyze epistemological concepts, assuming they are describing not the peculiarities of a set of languages but the structure of human cognition.

In its broadest version, the question is in what way, if any, the language of a speaker shapes, to a greater or lesser degree: (i) their perception of external reality (natural and social objects and events); (ii) the way they categorize these objects and events; (iii) the cognitive mechanisms with which they process the information that comes from the outside world; (iv) the mechanisms with which they categorize and process the mental states that make up their subjectivity; (v) how they phenomenally experience their mental states (*qualia*); and (vi) the attention they pay to the events of their surrounding reality and their subjective life. I will focus on the Quechua evidentiality system to address whether it could affect the epistemic intuitions of the speakers. Additionally, I will compare the

semantics of epistemic concepts in Quechua with that of English. But I will begin this part by discussing the very notion of epistemic intuition.

The concept of philosophical intuition has been widely discussed in philosophy (Hintikka 1999; Nagel 2007; Sosa 2008) and, in particular, its degree of reliability has been debated (Goldman 2007). Traditionally, it has been understood as a kind of direct, immediate, noninferential, and incorrigible knowledge. The expression derives from the Latin *intuitio*, which comes from the verb *intueri*, with the meaning of seeing something. Paradigmatic examples of intuition are the Cartesian *cogito*, the principle of noncontradiction, or the Aristotelian thesis that all action is directed towards an end. These are regarded as obvious beliefs that do not require further justification, since they are the starting point for other possible justifications. For this reason, the usual way of operating for philosophers is to start from a set of intuitions considered evident to extract consequences from there, developing a kind of reflective equilibrium (Cummins 1998; Goodman 1955) in which both the intuitions and their consequences are polished, enhanced, and harmonized through refined conceptual analysis. In ideal conditions, the reflective equilibrium would generate a theory with the capacity to explain a phenomenon considered philosophically relevant.

Epistemic intuitions are cases of philosophical intuitions and are understood as immediate, mechanical, and nonreflective inclinations on epistemological issues. An example of epistemic intuition is our tendency to think that knowledge implies belief, but not the other way around. A person or a community has epistemic intuitions if they tend to respond quickly, nonreflexively, and automatically to an epistemological question with answers that belong to the same category. Here are other examples of epistemic intuitions: Do I know that something is the case if it turns out to be true by accident and I have no reason to believe it? No. If I say that I believe that p and also that p is false, am I contradicting myself? Yes. Can a belief be true and false at the same time? No. If I know something, do I also believe it? Yes. If I believe something, do I also know it? No.

If someone said that they know something but that they do not believe it, we would think that they are contradicting themselves; which would not happen if they said that they believe something but do not know it. As it is not a logical contradiction, we assume that it is a conceptual contradiction: that is, that the inferential relationships between the concepts of knowledge and belief are formed in such a way that the first implies the second, but not vice versa.

The problem to be clarified is whether these inferential relationships are unique to some languages—for example, English and other related languages—or whether they are relationships that occur in any language because they reflect universal cognitive structures. It could also be the case that the two previous options are incorrect and that these inferential relationships are not contained in the semantics of a language but were developed by a community of speakers that obsessively reflected on these concepts (e.g., a Greek philosophical community), molding them in a certain way. This last option, however, is compatible with the first, because the obsession of this community of speakers could have shaped characteristics that later became general in their language.

It is debatable whether all human beings have the same epistemic intuitions—and, if so, why—or whether they vary culturally. It is also debatable whether the semantic and grammatical characteristics of languages could foster certain epistemic insights and discourage others. For example, could there be an epistemic community whose language allows accepting that one says that one can believe one thing and its opposite at the same time? Is a language conceivable in which its translatable concepts into English, “knowledge” and “belief,” allow us to affirm that one knows something but does not believe it? If we found that language, would we say that it is a counterexample to our intuition that knowledge implies belief, or would we rather think that we have mistranslated the two mentioned concepts? The answer to that question involves taking into account two fundamental philosophical principles: radical interpretation and reflective balance. As in any complex interpretation, we will make modifications in the meanings attributed to the concepts until the result seems sufficiently balanced and reasonable, under our parameters.

Like about a quarter of the languages in the world, Quechua has a complex evidentiality system. These are suffixes that express the epistemic attitudes of the speaker regarding the proposition they are uttering. Thus, these suffixes express conviction, conjecture, doubt, and so on, “so that the formulation of a judgment or any type of statement is inexcusable or unavoidable, free of any involvement—beyond its purely propositional transmission—by the speaker regarding the source of information, and their knowledge, or lack of knowledge, of what it enunciates or transmits” (Cerrón Palomino 2008: 166). Evidentials show our ability to evaluate the reliability of the information that we communicate or interpret, something fundamental for the development of social intelligence.

From a grammatical point of view, evidentials constitute a system that makes two things explicit: first, the source of the speaker’s information

(Forker 2018); second, the epistemic modality of the speaker, which concerns their attitudes regarding the truth or validity of the proposition they state: that is, if they know or believe the proposition. Although both dimensions, evidentiality and epistemic modality, interact, they are, in principle, different, since they can occur separately in a language.

Some authors consider that the evidentials mark a scale of confidence that the speaker has regarding the source of information. That is, even if they have not directly observed the fact that they are reporting, but know about it from a source that they consider extremely reliable, they could use a direct evidence marker. Note, however, that this confidence scale does not necessarily coincide with a conviction scale, since the speaker could consider that a source of information is very reliable, but, on this occasion and for particular reasons, they could have little conviction in it. The opposite case is also conceivable. Some studies show a certain flexibility in the use of evidentials, in particular when it comes to languages with an evidentiality system that coexists with languages that do not have this grammatical system (Castelain, Floyd, and Mercier 2019).

In recent years, evidentiality systems of languages have been extensively studied by linguists, but not by philosophers, even though evidentials express philosophical insights. The relationship between evidentials and cognition has been studied, especially in Turkish, Tibetan, and a few other languages, but not in Quechua.

Unlike languages that lack an evidentiality system, such as English, languages that do, like Quechua, require their speakers to make explicit the source of the speaker's information regarding the expressed proposition. This, in turn, requires them to monitor the source of information from which they have formed their epistemic attitude about the proposition. These evidentials would fulfill a function similar to that held in other languages, including Quechua, by epistemic verbs, such as knowing, believing, asserting, suspecting, conjecturing, and so on, but with an important difference: while in languages that lack an evidentiality system, one can decide not to use an epistemic verb, so that one can affirm something while remaining neutral concerning the source of information—which could also imply neutrality concerning their epistemic attitude—in Quechua, that would not be feasible. Thus, for example, I can say in English “There is a puma behind the hill” without specifying my source of information, which would not be possible in Quechua. Eventually, by making my source of information explicit, I would be implicitly suggesting my degree of conviction. For example, presumably, if I saw something, I have greater certainty of it than if I was told.

In Quechua, evidentials have four functions. (i) They express the source of the speaker's information about the proposition that they state (if they have seen it, have been told about it, or infer it). This suggests (ii) their epistemic attitude towards it (if they know, believe, suspect it, etc.). (iii) They point out the most important part that the sentence wants to communicate. And (iv) they show a type of epistemic responsibility of the speaker (if they take responsibility for their assertion and, therefore, expect their interlocutors to trust what they are saying).

Epistemic responsibility (Code 2020; Corlett 2008; Engel 2009) is normally defined as the obligation that a person has to try to know all the evidence that is available to them and that is relevant to establish their beliefs or communicate something to other speakers. It is part of epistemic responsibility to feel compelled to offer reasons and evidence to support what one believes or communicates.

An epistemically responsible agent would like to have true beliefs and, therefore, be endowed with mechanisms that allow them to have true beliefs, so that their actions are caused by those beliefs and desires. Likewise, an epistemically responsible agent would feel responsible for their verbal utterances: that is, they would communicate what they believe only if they have sufficient reasons and evidence to believe it. In a case where they believe something, but recognize that they have insufficient evidence, they would feel compelled to warn their interlocutors. Similarly, they might expect their interlocutors to act in the same way, to the point that, if they don't, they might feel entitled to reprimand them and consider the whole situation almost as a form of lie or deception.

Among specialists, there is a discussion regarding how many evidentials Quechua has. There are at least three in Cuzco Quechua, and perhaps even five of six in the Quechua spoken in Central Peru's Andes (Hintz and Hintz 2017).

(i) It is necessary to add the direct evidence suffix *-mi* in a sentence if the speaker is certain of what they are saying because they have observed it personally. This evidential indicates that the speaker expresses their statement based on the best available evidence. In that case, they take responsibility for the truth of what they say, and, in principle, they should be willing to justify their beliefs and reveal their sources of knowledge. If what they say turns out to be false, they would normally be called a liar or a seriously confused person. For example: "*Huk rune-m hamu-rqa-n.*" This would be translated into English as "I know that a man came." In this case, the sentence expresses the speaker's epistemic attitude, their

conviction, and their epistemic responsibility: that is, their guarantee that what they affirm is the case.

(ii) Unlike the previous sentence, the indirect evidence suffix *-si* is used when the speaker is not sure of what they are saying and only repeats something they have heard. For example: “*Huk rune-s hamu-rqa-n*.” This would be translated as “They say a man came.” It is usually expressed in Andean Spanish with the expression “they say” (*dicen*), as in the construction “A man came, they say.” In this case, the speaker’s epistemic attitude is imprecise, since they do not claim to believe or know it. In the best of cases, you think someone is saying it, but you are not sure of it either. For this reason, the speaker does not take responsibility for what they affirm but transfers the epistemic responsibility to other people. The speaker may have to justify why they think that other people say such a thing or how they know others say it, but they do not have to justify the truth of that statement or the source of the knowledge.

(iii) There is also the conjectural or inferential suffix *-chi* (in Central Quechua) or *-cha* (in Southern Quechua), which is used to indicate possibility, doubt, inference, or even desire. For example: “*Aycha mikhu-yta-chá muna-n*.” This would be translated as “He probably wants to eat meat.”

By using this suffix, with even more clarity than in the previous case, the speaker does not commit to the truth of what they say and may suggest a conjectural epistemic attitude, so that they do not take responsibility for the truth of the proposition. The important thing is that the speaker is only responsible for the truth of what they say in the first case, not in the other two.¹

(iv) Hintz and Hintz (2017) argue that there is also an evidential of mutual knowledge, which refers to the knowledge built by the interaction between the interlocutors, which would make it possible for the speaker to distinguish between individual knowledge and shared knowledge, understood not as knowledge previously shared by the interlocutors but rather as that built in the communicative interaction itself. This evidential expresses knowledge built by the interlocutors in the communication process, as a kind of intersubjective knowledge product of the agreements that are formed in one specific linguistic interaction. This knowledge built in interaction is tracked as conversation unfolds.

1. The previous Quechua examples are taken from Cerrón Palomino (2008).

Sources of information for mutual knowledge include the contributions of conversational participants, together with their jointly held beliefs and assumptions. Interlocutors use individual knowledge evidentials to introduce information and use mutual knowledge evidentials to establish facts by consensus. Once established, this shared knowledge is marked as such in subsequent speech. Evidentials are thus shown to be part of a system for building up the epistemic base shared between speakers in dynamic, interactive discourse. (Hintz and Hintz 2017: 88)

These authors found this evidential in the Quechua of Conchucos (Ancash, Peru) and marked with *-cha*. Howard (2012, 2018) found a similar phenomenon in Quechua from Humalíes (Huánuco, Peru).

All languages have different resources for expressing what languages with evidentials express morphosyntactically, but the difference is that in some languages, such as Quechua, the use of evidentiality suffixes is mandatory, so speakers are compelled to specify the source of information, which would imply the degree of conviction and epistemic responsibility. Now, this does not entail that this kind of speaker is more truthful or more aware of the validity of what they say; these are phenomena that in most cases are not conscious but involve complex cognitive processes.

Thus, we can affirm that having been educated in Quechua as their mother tongue, the brain of this speaker distinguishes in a mechanical, automatic, and not always conscious way between the various sources of information that justify their assertions (whether they saw it, were told about it, or inferred it), between their epistemic attitudes towards those assertions (if they know, believe, or suspect them), and between statements for which they are considered epistemically responsible and statements for which they are not, in a more natural way than in the case of a speaker of a language that does not have an evidentiality system.

A particularly interesting case of epistemic intuitions in Quechua occurs when one attributes epistemic attitudes to another person. To describe epistemic situations in which the speaker believes, knows, suspects, and so on, something, they can use epistemic verbs in Quechua, but they are obliged to use markers of evidentiality. However, when describing the epistemic attitudes of a third person, as when in English we say “He believes that *p*,” “He knows that *p*,” and so on, evidential suffixes cannot be used, since the speaker cannot be certain of the epistemic attitudes of the other person: that is, the speaker cannot take responsibility for whether the other person knows or believes something, since they cannot have

evidence of it. Thus, the word *ni* is used, which would be translated into the English verb “to say,” but with some peculiarities. In English, we would express something like “*X* believes that he will not go tomorrow,” where the verb allows a direct sentence complement so that the verb “believe” expresses the epistemic attitude “*X* believes that *p*.” Since, in Quechua, these concepts cannot be lexicalized with evidential suffixes, when the speaker wants to express the epistemic attitudes of third parties, they use the verb “to say,” *ni-*, but formulated as a direct quote from the epistemic attitude of the third person. Thus, one would not say “*X* thinks that he will not go tomorrow,” but “I will not go tomorrow, says *X*” [*paqarin mana-m risa-q-chu*] *ni-n* (Cerrón Palomino 2008: 203).

In English and other Indo-European languages, the truth value of sentences in indirect contexts is in the epistemic verb. If I say “I believe that he believes that tomorrow he will not go,” the truth value of the sentence lies in my epistemic attitude of belief, so that it may or may not be true that I believe it. Secondly, there is the truth value of the subordinate clause [“he thinks he won’t go tomorrow”]. But in Quechua, the truth value is in the verb “to say.” In “I’m not going tomorrow, says *X*,” the truth value is in whether they say it or not, not in whether they believe it, and even less in whether I believe they believe it.

A question that arises from the above is whether the Quechua evidentiality system affects the epistemic intuitions of Quechua speakers when they speak another language without an evidentiality system, such as Spanish, and how epistemic situations are formulated in that language. The phenomena of bilingualism and diglossia have been widely studied between Quechua and Spanish, including how these affect their evidential systems (Pfänder and Palacios 2013; Sánchez 2004), although only in the linguistic effects, not in regard to the influence that this could have in speakers’ epistemic intuitions. A plausible hypothesis is that Quechua speakers would carry part of their epistemic intuitions with them when they speak Spanish, although they would express them with other resources, such as when the Andean Spanish speaker adds “they say” (*dicen*) to the end of a sentence to express the equivalent of an indirect evidential. It is also known that a language with an evidentiality system that is surrounded by languages without it tends to lose it (Aikhenvald 2018). Some epistemic intuitions could be universal, as long as they belong to a folk epistemology that could eventually even be part of an epistemic brain module, while others would be cultural and variable.

But my claim is that the morphosyntactic peculiarities of languages could encourage one to have certain epistemic intuitions and not others,

in addition to universal ones, if they exist. The point is that a Quechua speaker would be obliged by their language to pay attention—whether consciously or not—to epistemic attitudes that an English speaker would not be obliged to consider. Certainly, being an English speaker does not prevent paying attention to what the Quechua speaker pays attention to, but the latter would be obliged to do so due to the morphosyntactic characteristics of their language.

The epistemic intuitions of a community are also reflected in the semantics of its language, as we will see with another example. A very influential tradition in philosophy holds that the concept of knowledge is understood as justified true belief, something that Plato is the first to discuss in the dialogue *Theaetetus*. Thus, for example, one would tend to consider as contradictory the statements “I know that p , but I don’t believe it” and “I know that p and I believe it, but it is not true.” It is a question not of logical contradiction but of incompatibilities resulting from the inferential relations between the concepts involved. Likewise, one would consider the statement “I know that p , I believe it and it is true, but I have no reason to believe it” to be at least debatable.

Some philosophers, assuming a universalist thesis, maintain that Plato and the philosophy after him would have reconstructed, polished, and clarified a set of intuitions that would be universal and innate, since it would respond to inferential relationships between concepts that, in turn, depend on cognitive characteristics of the human brain shaped by evolution. The nonuniversalist position, on the other hand, maintains that the triadic conception of knowledge is an epistemic intuition typical of some speakers, for example those familiar with a certain philosophical tradition. This implies that a person unfamiliar with the Western philosophical tradition could accept the possibility that someone knows something but does not believe it. Suppose that they know that everything the shaman says is true, and therefore they know it, but they admit they cannot believe it. A third position, which we will call *linguistical*, would maintain that these intuitions are not universal in any language, but are typical of one in particular, for example English, which has inherited them from Old English, Latin, and Greek, given the inferential relations that in those languages occur between those concepts. That might not happen in Quechua. A fourth position, which could be called *adaptive*, would hold that there are no innate universal inferential concepts or relationships, but that every language and culture should have developed, for reasons of social adaptation, some basic epistemic concepts, such as knowledge, truth, justification, and so on, that function

mostly in the same way, since every human community needs to distinguish between reliable and unreliable representations of the world, and when one cannot guarantee them empirically, one must rely on some kind of justification. If so, every community would require certain justification criteria for its representations or beliefs, even if they were not the same. Thus, every language would have concepts similar to what we call “knowledge,” “truth,” “belief,” and “justification,” among others, which could have inferential relationships similar to ours. It is not necessary, however, that these concepts are lexicalized, but if they are, they could have different connotations than our concepts have. If this option were correct, speakers of that language could discover the inferential relationships between their concepts by focusing on analyzing them. That would generate a feeling of universality, but this would depend not on the configuration of our brain but on the adaptive needs of any community.

Let’s look at an example: every language has a word for water and another for thirst, even if they have different connotations because, for example, the word for water could have religious associations and the word for thirst could be linked to a type of punishment. There may be inferential relationships between the word for water and the word for thirst that are very similar to ours. For example, in our language and in the imaginary language, it would be contradictory, or at least strange, to say “I’m going to quench my thirst by not drinking water.” Something similar would happen with epistemic concepts. If so, once a speaker of that language focuses on analyzing their epistemic terms, they might discover inferential relations similar to ours, so that whatever concept they have for knowledge will imply belief, but not the other way around, even if those concepts are not lexicalized or have other connotations. My position on that matter is that we do not have sufficient reasons to affirm categorically that there are universal and innate concepts and inferential relations, although this may be the case. But we do have reasons to argue that some concepts and inferential relationships are highly socially adaptive so that they could be very similar across languages. Of course, there are also concepts in some languages that are not present in others.

But, regardless of whether the triadic conception of knowledge is universal or not, the Western philosophical tradition tends to hold that the carriers of truth are the beliefs or propositions contained in sentences. An additional feature in this tradition is to understand the knowledge of something as a type of mental representation. This is associated with the fact that most of the epistemic terms in Indo-European languages have had an etymological origin linked to concepts of vision, which comes

from the fact that *Homo sapiens* is a primarily visual species. Within the Western tradition there are also, of course, currents that would object to this position and underline the practical and transformative nature of the reality that knowledge has, such as the various pragmatist schools of thought.

Now let's compare the previous discussion with what happens in Quechua. The word normally translated as knowledge is *yachay*, which is used in the sense of having information—obtained from a systematic experience—that allows us to do something. This practical knowledge can be taught, learned, and transmitted, but it is not purely representational knowledge; rather, it involves a practical interaction. *Yachay* is used in the sense of knowing something or knowing how to do something, such as sowing the land, roofing a house, or speaking a language. It is a practical knowledge of daily use and not abstract (Mannheim 1991: 85). In colonial dictionaries, there are other meanings of *yachay*: to reside, to live, to dwell, to be used in doing something, to get used to something or to do something, and to love some place (Anonymous [1586] 2014). González Holguín's dictionary ([1607] 1989) adds as meanings of *yachay*: to create, to raise, to make, or to make grow. Itier (1993: 155) argues that in pre-*proto-Quechua*, the root of *yachay* means to fully achieve something, being a verb of movement.

It is important to note that all these senses of *yachay* (knowing how to do something, getting used to it, living somewhere, creating or raising something, achieving something) refer to an eminently practical rather than representational activity (Quintanilla et al. 2023). *Yachay* emphasizes knowing how to do something or being used to do something more than knowing that something is true. The representational or propositional use cannot be ruled out, according to which one knows that *p*, that is, one knows that a proposition is true, but without a doubt, the prior and oldest meaning is practical.

By contrast, the word *riqsiy* does have a representational sense associated with vision and has the connotation of recognizing something or seeing it with familiarity. It can also mean identifying or verifying. This word is comparable to the many epistemic concepts in Indo-European languages that come from verbs of visual perception. Another epistemic verb, *musyay*, refers to suspecting, anticipating, or forecasting.

The word usually translated for truth in Quechua is *chiqua* or *cheqaq*, which is used to confirm something that someone has said and does not suggest the idea that it is a property that beliefs and sentences have, either in themselves or for any other reason. *Chiqua* is also used to preach

someone's sincerity or good intentions. In the Quechua tradition, there does not seem to be a concept of truth as a correspondence between what someone says or thinks and what things are. Still less is there the idea that there could be propositions or assertions whose truth depends solely on their relationship with reality and not on the characteristics of a speaker who thinks about them. Additionally, as seen, there is no word for belief in Quechua, so to affirm that someone believes something, it is to state that they say it (*nin*). The point, then, is that *yachay*, *chiga*, and *nin* have different connotations than those that can be translated into English, but they also seem to have some similar inferential relationships. For example, it would be acceptable to say that if someone knows something, then they can say it, but it would not be acceptable to say that if someone says something, it is because they know it.

Here, then, we would have some similar epistemic insights and some different ones. While, at least in one branch of the Western tradition, we would associate knowledge with the possibility of accurately representing something, and would express it with the metaphor of clear vision, the term *yachay* in Quechua privileges the ability to know how to do something. While the Western tradition would emphasize knowing *that*, Quechua would prefer knowing *how*. Being complementary and not exclusive senses, however, they illuminate different aspects of a complex cognitive phenomenon. *Riqsiy* does indeed have a perceptual connotation, but it is not usually used in the sense of having information about something but rather in the sense of being familiar with something.

The debate remains open on whether (i) there is a set of universal and innate epistemic intuitions, which languages capture in different ways; (ii) there are no universal epistemic intuitions and each culture and language carries, as it were, its intuitions; or (iii) there are some similar epistemic intuitions arising from groups' need for social adaptation.

But, in any case, the analysis of languages would allow us to reconstruct their users' epistemic intuitions, be they universal or particular. Additionally, being a speaker of a language would encourage one to adopt certain epistemic intuitions and not others. One can learn different languages with different epistemic intuitions and adopt them all, at all times or at different times. Furthermore, the comparative empirical analysis of the epistemic intuitions contained in the different languages could show us which ones are universal and which ones are not.

However, it is necessary to confront a possible misunderstanding. I do not wish to suggest that there is a delimited set of epistemic insights that are present in every culture or language. First, neither languages

nor cultures are delimitable. Second, speakers of the same language and members of the same culture could have different epistemic insights, if they have been exposed to something as simple as different readings. So, I am neither arguing for nor assuming the existence of compartmentalized sets of epistemic intuitions with clear boundaries. The relationships between concepts from different languages and cultures overlap; the same occurs with inferential relationships between concepts and with epistemic intuitions.

The relations of causal influence between language and culture are not unidirectional but multidirectional. That is, the intuitions that are consolidated in a community tend to be part of the morphosyntax and semantics of their language. Likewise, these characteristics affect the beliefs of that community. But the way the influence of language on cognition is clearer is when an infant acquires a language in a community. When that happens, the child implicitly adopts some epistemic intuitions typical of that community, many of which are contained in the morphosyntax and semantics of the language. But if such a speaker grew up exposed to a different cultural tradition, the intuitions could overlap. However, the mere fact of acquiring a language and its morphosyntactic characteristics, as in the case of the Quechua evidentiality system, would encourage the speaker to grow up paying more attention to certain relationships between events and objects of reality than would have happened if they had not grown up in that language. Additionally, spending a lot of time speaking a certain language and, therefore, being obliged by that language to attend to certain relations of reality (like source of information, degree of certainty and epistemic responsibility) would have structural effects on the speakers' brain, given the brain's plasticity.

If a person is used from birth to making associations or recognizing connections in reality—because their language demands it—it is likely that they will generate new neural networks that allow them to be faster in making or recognizing those associations. For example, if they are used to distinguishing—even in an unconscious way—between information for which they are responsible and information for which they are not responsible, as in the case of languages with evidential markers, they will probably develop a linguistic practice that does not have an evidentiality system.

There is an additional point that I will not dwell on now. It seems important to question a widespread practice in philosophy of analyzing the semantic characteristics of a language—often Greek, Latin, German, English, Spanish, or another Indo-European language—assuming that

in doing so we are also analyzing some universal cognitive traits of the human being, which is the universalist position. On this point, my objective has been to point out the need to pay more attention to linguistic diversity, being alert to the risk of considering structural features of human cognition as characteristics that could be typical of only a few languages.

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CHAPTER 8

A Postcognitivist Approach to the Emotional Experience of Language in Native Andean Speakers with Spanish as a Second Tongue

María Inés Silenzi

The cognitive sciences comprise disciplines whose contributions come from neurosciences, epistemology, psychology, philosophy, anthropology, and linguistics, among others. Each of these disciplines attempts to respond to different cognitive processes from its own specific concern. On this occasion, I focus on those that explain the affective dimension of language. Since language plays a large role in people's psychological behavior (Haeussler and Marchant 2009)—because it allows, for example, the expression of emotions—I consider in particular the affective dimension of language in speakers. To do this, I examine the paradigms that frame cognitive research.

Indeed, when reviewing the literature, I found numerous positions on how different factors, aspects, and/or dimensions affect some of the cognitive processes involved in language. Several of them, from an epistemological point of view, can be grouped under the so-called *cognitivist approach* to cognition, which has been predominant in the cognitive sciences. In addition, I observed many other positions that focus on different aspects of cognition, such as emotions, that have been forgotten or neglected by cognitivism. This accounts for another incipient perspective,

called the *postcognitivist approach* (Silenzi 2014). As my research is specifically oriented towards the emotional dimension of language, I examine whether, epistemologically, this last approach provides an adequate and significant theoretical scaffolding. Moreover, to carry out my task, and in view of the volume in which this chapter is included, I address a special type of speaker, namely, bilingual individuals with an Andean mother tongue and whose second language is Spanish. There are two reasons for this choice. On the one hand, I consider bilingual speakers in general, since, according to the various definitions of “bilingualism,” the cognitive processes involved in it impact precisely on the affective dimension that interests me. On the other hand, I concentrate particularly on Andean languages because of the intrinsic relationship between them and their speakers’ affective dimension: both are mutually necessary to establish an important component of Amazonian culture and identity (Calderón Rivera 2012). For such reasons, given the scarce cognitive exploration of Andean languages, which is invisible in the hegemonic social and educational context in particular, there is an urgent need to recognize the importance of the emotional component of language in speakers belonging to this culture.

To illustrate my idea, I take as an example one of the many common ways to express love in Quechua, *Munakuykin urpicháy*, which can be translated into Spanish as *Te amo, palomita mía* (I love you, little dove). Based on this example, and having in mind the phenomenon of the so-called emotional experience of language, I ask what implications this phrase has for native Quechua speakers when expressing it in their own language or in Spanish. Does using one language or another imply that speakers “feel” differently and/or that their knowledge and perception of the world about “love” varies? Do bilingual speakers feel more emotional when expressing this feeling in their mother tongue than when they do so in Spanish? In accordance with the general objectives of this book, these and other questions have led me to examine how Amazonian and Andean culture and languages shape the production and understanding of knowledge. Therefore, my work contributes to investigating the different ways in which emotions are conceptualized in the cultures of the Indigenous communities of the Andes and, thereby, advances cognitive research on these languages.

The scheme of this chapter is as follows. The second section describes the phenomenon of the emotional experience of language, and the third section introduces the cognitive and postcognitivist approaches to the cognitive sciences. The fourth section addresses some research studies on

native Andean speakers with Spanish as a second tongue, noting the opposition between educational (academic) and noneducational contexts. The fifth section returns to the third section and, on the basis of what has been analyzed, I determine which of the two approaches to the cognitive sciences is the most appropriate epistemologically when examining the aforementioned phenomenon.

The Phenomenon of the Emotional Experience of Language

When establishing a correspondence between language and cognition, Rival in this volume mentions that one of the main tasks of philosophy is to question the universalizing tendency within which knowledge is experienced, developed, and constituted. To counter such a tendency, she argues that we should pay fundamental attention to the particularity of the context in which these processes occur. Along the same lines, and specifically in the first chapter of this volume, Barrett highlights the relevance of attending to the context from which Indigenous epistemologies are studied. For him, Indigenous knowledge must be approached by taking into account the *particular* region and the *moment* in history where the agent is embodied and situated. When analyzing the semantic characteristics of a language—on the assumption that certain universal cognitive traits of human beings are also being examined—it has been argued that such analysis is important for describing the subjective life of its speakers and the way in which these characteristics can affect how they categorize, understand, and phenomenally experience their own emotions.

In this sense, as a strategy to address this phenomenon, I use the discussion on the universality versus particularity of language, considering the way in which humans understand and experience emotions. I start from the premise that some concepts related to emotions have similar meanings in all languages, although they may also present some differences. Since there is a very rich vocabulary for communicating feelings, many words seem to name similar emotional states. For example, various translations suggest that, in English, the word *friendship* can be equivalent in Turkish to *dostlucuk* and to the Hungarian word *baratzag*. Therefore, the following questions were posed to guide my work: When using the concept *friendship*, is the emotion to be conveyed experienced in the same or different way whether English, Turkish, or Hungarian is spoken? Are there significant variations between expressing this sentiment

in the mother tongue and in the foreign language? Do speakers “feel” different, in terms of greater or lesser intensity, when using one language in opposition to others? In summary, I analyze what individuals “experience” in a given situation when speaking one language or another.

First, and with regard to speakers’ emotional experience, it seems appropriate to distinguish the *dispositions* of emotional *experiences* in order to more clearly understand their differences (Silenzi 2019). On the one hand, emotional dispositions refer to those phenomena in which people have a certain inclination to behave in a particular way in a specific situation. An example of this is the predisposition shown by parents when taking care of their children when they are sick or when cooking for them because they are hungry, among many other things parents do for their offspring. However, just because parents sometimes worry about their children does not imply that this is the case all the time, and it certainly does not mean that children are not loved. This disposition differs from emotional experience, such as those when breastfeeding children, holding them asleep in one’s arms, or hugging and kissing them. This last way of understanding emotions, to which I pay special attention in this work, involves experience, the bodily dimension, or, in other words, *feeling with the body*. This refers to *speakers’ experience*, which also implies a certain temporal duration in which an individual faces and acts in response to a situation (Schwitzgebel 2010).

Given these differences, I specifically observe that most of the literature on the subject refers to this *emotional experience* of speakers when describing the results of “measuring” the emotional distance between using their mother tongue or a second language. In addition, this evidences what speakers feel in a given situation in contrast to another. For instance, Ivaz, Costa, and Duñabeitia (2016) argue that, considering conceptually equivalent terms, the emotional implications of each of them in the speakers’ foreign language exert less influence than in their mother tongue. This demonstrates that people are more emotional in their native language than in their foreign one. Similarly, Harris (2004) carried out a series of experiments where bilingual speakers reported experiencing more intense emotions when using and listening to their first language than their second. This occurred even when a second language was learned early and had become dominant. Indeed, Spanish–English speakers who grew up in the United States (early learners) or those who were first exposed to English during middle childhood while residing in Latin American countries (late learners) listened to the words and phrases while their skin conductance was monitored. The stimuli

included taboo words and sexual terms. Consistent with the hypothesis that a second language is less emotional for late learners, expressions presented in the mother tongue induced more skin conductance responses than comparable terms in the second language. Briefly, these and other investigations support people's anecdotal reports that they are less emotionally reactive in a second language compared with their own language, and, even more specifically, that they "feel different," which accounts for the various aspects of the phenomenon of emotional experience (Pavlenko 2006).

Of course, and although the emotional experience of speakers can be an imprecise metric, analyzing what they "feel" when expressing themselves in a certain context can reveal their cultural richness (Jackson et al. 2019). Addressing emotional experience as follows is an interesting field of research within the cognitive sciences.

Language Ideology and Emotional Experience

One way of approaching the experiential phenomenon of language from a cognitive point of view corresponds to what linguistic anthropologists call "linguistic ideologies," that is, values, attitudes, and ideas that people have concerning their language. My argument revolves around the fact that Quechua speakers have an ideology or attitude about the emotional expressiveness of this language. This ideology, among other aspects, influences behaviors and attitudes around the issue of identity and underpins the power relations that underlie social hierarchies. The hegemonic processes I allude to could operate in any context in which a majority colonial language encounters a minority Indigenous one. It does not necessarily have to do with specific mechanisms of expression in, for example, Quechua. Moreover, such attitudes and values could exist independently of any linguistic evidence that this language is more emotionally expressive than, say, Spanish. These clarifications do not dismiss the possibility that Quechua has unique mechanisms for expressing emotions or that people connect more emotionally when they hear things in their language. Ultimately, these observations refer to phenomena other than the many and varied interrelationships that can be established between emotions and language. However, my main argument, aiming to propose the postcognitivist approach to cognition as an adequate epistemological scaffolding, is based on the concept of linguistic ideologies.

Of course, offering a clear and precise definition of this notion is not an easy task, since it can be understood as a grouped concept with several

converging dimensions. There are different layers of partially overlapping meaning that can be analytically distinguished (Kroskrity 2004). Among them, I am interested in those definitions that highlight the contextual, cognitive, affective, and active value of the agent anchored in a particular situation.

In this regard, Garrett attributes the success of the concept of linguistic ideology to the attention it pays to the political background of the valuation of languages. Although he does not explicitly delimit its interpretation, he characterizes an ideology as “a naturalized and patterned set of assumptions and values about how the world works, a set that has been associated with a particular social group or culture” (Garrett 2010: 34). In a similar vein, Verschueren (2012) conceives ideology as a set of underlying patterns of meaning, interpretive frameworks, worldviews, or everyday forms of thought and explanation that naturalize relationships between different social groups, thus becoming an instrument of legitimation of certain attitudes, behaviors, and policies (see also Cisternas 2017). These authors, who do not clearly define linguistic ideology but rather describe the notion of ideology, understand the former as a particular expression of ideology at the level of relations between society and language. In this sense, they highlight one of the three characteristics that, according to del Valle and Meirinho-Guede (2016), constitute ideology: contextuality. This refers to the fact that linguistic ideology is linked to the context in which it operates and the way in which that context gives it full meaning.

Following Van Dijk (2005), linguistic ideology involves a set of beliefs that a social group shares and that is the basis of the attitudes it also takes. Ideologies are produced and acquired through the interaction of group members. At the same time, Van Dijk considers that ideologies, regarded as mental structures, can be expressed and represented or produced in both discourse and social practices, whether as “empowerment, discrimination, oppression, exclusion or opposition” (2005: 28). In turn, Kroskrity (2004) argues that linguistic ideologies are beliefs and feelings, implicit and explicit, about the use of language in the social world to construct linguistic evaluations and engage in communicative activities. Note that the first author highlights the cognitive warmth of ideologies and the second highlights the affective value. If we consider the aforementioned characteristics in their entirety, it is possible to identify some traits shared between several, or most, of these: (i) they are a set of ideas or beliefs (cognitive value); (ii) they refer to languages and their social use (active value); (iii) they are considered feelings (affective

value); and (iv) their content is influenced by the context in which the subject is located (contextual value). In this way, it can be suggested that a preliminary interpretation of the concept brings together, in turn, the key elements that postcognitivism wants to accentuate.

The Role of Emotions in Language and the Cognitivist and Postcognitivist Approaches to Cognition

In recent years, the study of emotions has gained growing interest in cognitive psychology, philosophy of mind, and neurosciences, among others. Perhaps one of the greatest attractions within this incipient field of research results from the strong dissatisfaction with the traditional conception of emotions. In this newer perspective, emotions no longer play a passive role in people's rationality, nor are they conceived only as feelings that individuals are limited to "suffer" (such as pain, fear, anger). On the contrary, it is currently assumed that emotions actively and decisively participate in various cognitive processes, such as those involved in language, becoming one of the main objects of study in the cognitive sciences (Gardner 1985). That is why it is appropriate to study which of the different approaches within these sciences emphasize the role of emotions in language.

Cognitive research is characterized by two major current conceptions of human cognitive architecture: (i) the computational conception and (ii) the situated/embedded/embodied conception of the mind, corresponding, respectively, to the *cognitivist* and the *postcognitivist* approaches to cognition. Since, in this chapter, I consider both, it is necessary to describe them briefly, but not before making two clarifications. First, the objective of this work is not to detail each of the approaches separately, but rather to provide an overview of the current situation within the cognitive sciences. Second, the criteria through which the approaches have been divided are neither fundamental nor absolute and refer to the expository and methodological purposes of this work. There are approaches that are concerned with more than one aspect of the conception of the mind, such as the so-called *extended mind approach* (Clark 2001, 2008), which is both "computational" (cognitivist) and postcognitivist, as it has many elements that correspond to the situated conception of the mind. Like any taxonomy that intends to separate scientific positions that are still in a development phase, the classification proposed here is not enough to account for the variability of the theoretical formulations

attempted to be grouped (Silenzi 2015). However, what has been said so far will be sufficient for the purposes of this work.

Therefore, I begin by describing *the postcognitivist approach* to the mind. This approach comprises several alternative perspectives, such as *situated cognition*, *enactive cognition*, and *corporeal cognition*. Although a number of differences can be found among the various perspectives, I aim to bridge these discrepancies, considering their general assumption (Baedke and Fábregas-Tejeda 2023; Nicholson 2014; Rosslénbroich 2023; Sultan 2015; Walsh 2015). The characteristics that reflect the central tendencies of this approach, and which I consider useful for my purposes, are (i) interaction and dynamism as central postulates for interpreting the cognitive system, and (ii) the simultaneous understanding of bodily, neural, emotional, and contextual factors that connect in the present time. Through the interaction between mind, body, and world, these perspectives emphasize (Thagard 2005) that the body is regarded as the place where experience takes place, without prior distinction between subject and object. Cognition can be understood as a dynamic link between the body and the world, which allows, in turn, an “active” and not “static” description of the body–mind relationship (Damasio 1994, 2008; Silenzi 2015). As a way of anticipating my conclusions, the value that the postcognitivist approach places on the mind–body–environment association is fundamental when not only characterizing our mental processes, but also analyzing critically and epistemologically the experiential phenomenon of language. Note that this phenomenon attributes importance to the affective dimension of the “incarnated” speaker, “situated” in a particular context, in a world and in real time, when talking with another person. In addition, this approach highlights the influence of affects or emotions and the historical-cultural elements within the context, which, based on the relationship between language and emotions that interests us in this chapter, is key to address. The fifth section further develops my argument.

With regard to my description, the *cognitivist* approach is criticized for focusing *solely* on mental representations, neglecting that some cognitive processes, such as those involved in language, are not isolated and incorporeal, but are carried out in individuals who interact with a physical world (Calvo and Gomila 2008; Heras Escribano 2021; Newen, de Bruin, and Gallagher 2018; Shapiro 2019). Hence, the knowledge structure of the system is symbolic-representational, not able to include the dynamic factors that cause behavior, such as the particular context, the immediate time, and the specific need of the agent. This approach

assumes that objects and events exist independently of the individual's cognitive recognition, as well as potential relationships between events or situations (Thagard 2005). On the contrary, for postcognitivist approaches, everyday experience develops in a concrete world and in real time, where cognition is understood as a dynamic link between individuals and the world. These last components are essential when estimating the scope of the postcognitivist approach to the topic of this study: we cannot ignore emotions, cultural elements, or context when investigating what happens experientially in speakers in general and in bilingual speakers of Andean languages in particular. Since cognitivism places little or no emphasis on emotions and situationality (metaphorically called "real anchoring"), it is convenient to readdress the phenomenon in question under the postcognitivist conception of the mind, due, among other reasons, to the importance of context and emotions in speakers' experience. To defend this position, some research on bilingual speakers of Andean languages is described below, regarding specifically the relevance of the interaction between the affective dimension and the context where speakers are located.

The Importance of Context in the Affective Dimension of Native Andean Speakers with Spanish as a Second Language

As a result of my review, I establish below some approximations between the phenomenon of the emotional experience of language and those native Andean speakers who use Spanish as a second language. To advance my conclusions, my examination underlines the importance of emotions and the context where speakers are situated, that is, the interaction between their affective dimension and their particular situation. As a result, this leads to a consideration of the postcognitivist approach to the mind as the most appropriate epistemological scaffolding for its analysis.

First, it is worth mentioning a limitation of my review. The general literature on the subject contains more investigations on the emotion-language connection in monolingual speakers than in bilingual speakers, since the former are the typical research participants. Moreover, most cross-cultural studies on language and emotions compare only two groups, that is, between predominantly industrial nations and bilingual speakers of Andean languages (Jack et al. 2012). Consequently, there is scarce research on bilingual speakers of Andean languages, my work being a contribution to this regard.

Taking into account the concept of linguistic ideology as an eminently expressive language, Quechua is conceived as especially suitable for manifesting emotional states and feelings (Gálvez 2006: 94). Considering the way in which Andean texts are translated and, once again, the importance of the contextual factor, this seems to “depend on the circumstances, the emotions that are aroused in a context, the intentions of the speaker, and the factors that only the receiver understands” (Manrique 2017: 28). Such dependency emphasizes the relevance of the contextual/emotional dimension for the phenomenon of emotional experience. Bearing this in mind, in several investigations on bilingual speakers based on situations involving emotions, their emotional behavior in their mother tongue is underlined compared to that in their foreign language.

Some expressions of deeper positive and negative emotions or life experiences, such as the birth of a child, seem to be associated with the use of Quechua, while those concerning formality, order, and social tension appear to be more linked with Spanish. The choice depends on the context where the agent is located, which, taking into account the cognitive aspect of this issue, could be attributed to a double information-processing system: a rational one dealing with facts and an experiential one treating personal experiences (Epstein 1990; Katz 2005). As an example of such a choice, it is interesting what happens in Quechua languages when singing at carnivals. On the one hand, songs raise emotional experiences whose paralinguistic substructure provides a dimension suitable for the use of this expressive channel. On the other, carnivals, like no other collective festival, are a great setting where emotions, such as frustrations and hidden desires, are released and where mockery and laughter relativize any hierarchy (Gálvez 2006: 89).

Considering the importance of the agent anchored in a specific context, it can be observed that those who speak Quechua choose to sing in this language (instead of Spanish) and that they are not criticized but rather praised for doing so. In this sense, Albó (1974) reports that the preferred language for singing among Quechua–Spanish bilingual speakers is 54 percent Quechua, 34 percent Quechua–Spanish, and 12 percent Spanish.

As another example, I consider the emotional dimension of speakers and the context in which they are situated, referring to the interrelation between Quechua and Spanish in the central valleys of Bolivia (Howard 2019). Here, as a main premise, the patterns of use of these languages should be explained, among other ways, in terms of the

unequal relations of social, economic, and political power between the urban and rural sectors. Having in mind the exchange of the bilingual speakers between both sectors and the emotional nuances that this entails, in the linguistic domain of kinship, for example, Quechua terms are replaced by Hispanisms. Moreover, in the elaboration of the Latin American beverage *chicha*, Quechua is not only used in the sociolects of both groups, but is also adopted within the Spanish of the town. Thus, speakers of these languages express themselves emotionally in different ways depending on the context in which they are situated and what they are referring to.

Furthermore, Haboud discusses some methodological issues with respect to researchers and research subjects and interviewers who have done field studies on Indigenous cultures. She observes that using the speakers' primary language in the linguistic field helps the interviewees to respond in their first language and, in terms of affectivity, to "express positivity towards their language" (Haboud 2005: 184), and with it their cultural identity.

In summary, in my literature review, I frequently note the importance of context in distinguishing what happens emotionally to speakers when "moving" from one situation to another. Within the technological field, Coronel-Molina (2005a) emphasizes the pedagogical contribution that information and communication technologies (ICTs), such as the use of the internet, can offer when evoking emotions. Given that ICTs are mostly transmitted through the predominant languages of knowledge, such as English and Spanish, without attending to native languages, Coronel-Molina argues that the creation and use of digital audio and video files with paralinguistic features can motivate and facilitate bilingual learners to use their mother tongue in its true cultural context. In terms of entertainment, for example, Casares (2008) discusses the importance of producing cinematographic films in Quechua, emphasizing the emotional reception that this entails for its speakers. To justify the emotional significance, some testimonies appeal to the emotions that arise when listening to flight announcements and air traffic information in their own language. The same is asserted by Quechua soccer fans, who, in their own language, listened to the Peruvian national team play a World Cup match. Perhaps the word "goal" is the same in Spanish as in Quechua, but such testimonies highlight that the "feeling" of listening to a broadcast in Quechua differs (Ávila 2017). Of course, these examples are only proposed to illustrate a possible approximation between the affective dimension of bilingual speakers and their particular situation. In

no way is such an approach exhaustive or sufficient, leaving our research agenda pending to deepen this issue.

Among the questions about how languages shape subjectivity, I aim to identify whether those who have two mother tongues and use two different conceptual apparatuses experience emotions differently, depending on the language spoken and the context in which they are situated (Satpute, Nook, and Cakar 2020). In this regard, it seems appropriate to consider the example of Quintanilla et al. (2023: 94) about the Quechua word *llaki*. This is usually translated into Spanish as affliction, sorrow, and tribulation, but also as anguish and regret: while Spanish has three words for three types of phenomenal experiences of emotions (sorrow, anguish, and regret), Quechua has one that combines all three.

Let us imagine that a bilingual person performs an action that they regret and that causes them anguish and sorrow. Faced with the task of understanding what they feel, being a Quechua speaker would familiarize them with a specific type of phenomenal experience, which would allow them to recognize it more easily when they are in that state. And of course, so would the community in which they are located: clearly communicating what they feel would be quickly identified by another Quechua speaker because of this familiarity.

In this case, the context/community in which the agent is situated would condition how a Quechua speaker communicates a peculiar and different subjective phenomenal experience. It would not be the same to communicate that experience with the lexical baggage of this same language or with a different lexical system.

The attitude towards a language or the variety of a language evidences not only that it is configured by strictly linguistic attributes, but also that it has a social and sentimental connotation. Languages contain certain linguistic characteristics, as well as channels through which social aspects and affective values can be transmitted (Ytusaca Quispe 2022).

Linguistic Ideology and the Affective Dimension in Bilingual Speakers

Several investigations have examined the sociocultural effects that bilingualism and language contact have caused in each sector of Quechua-speaking societies. These variations have left their mark on the social distribution of Quechua in the current population. According to Howard (2021), in Peru and Bolivia, Quechua monolingualism is manifested among the peasant-Indigenous sector. Although in a decreasing manner, in Ecuador the Quechua-speaking Indigenous population is

predominantly bilingual with Spanish. Despite living in proximity to the Quechua population, the adult *mestizos* in this country have not acquired the Indigenous language as a second tongue, unlike their parents and grandparents, who tended to learn it in the conditions of work proximity generated by the system of tax authorities. Harvey (1991) demonstrates the importance of Spanish–Quechua bilingualism as a component of *mestizo* identity for Peru, and this is still valid, as evidenced by Babel (2018) for Bolivia.

Now, as a consequence of this social distribution, the linguistic ideologies that affect the use of Quechua in speakers' daily lives are usually associated with different affective experiences. I am interested here in the affective dimension of the "situated" agent in each of the various sectors of society (contexts) and how the operation of linguistic ideologies has been experienced emotionally in the lifestyle of Quechua speakers.

On the one hand, several testimonies reflect a positive ideology between speakers, their language, and the environment where they are situated. For example, Howard cites an excerpt from a speaker who had not left his home territory and who said he did not aspire to do so: "*Siempre puni qhichwamantaqa, es nuestro clima, y ¿cómo va a ser pues?*" ("Always because of our Quechua, it is our climate, and what is it going to be like?") (2007: 88–89). Quechua was without a doubt their language, of which they were proud, and they did not even think that one day it could disappear. Thus, the positive trait that is most distinguished when valuing Quechua is the loyalty that its speakers feel towards their mother tongue, even though this affective valuation does not benefit them in certain areas, such as academia.

In contrast, there is also a negative ideology between speakers, their language, and the environment where they are situated. From the moment the population comes into contact with the Spanish-speaking sector, due to the move to urban centers and the relationship with state institutions that this involves, negative linguistic ideologies have more effect on individuals' lives, especially among the now older generations. Quechua speakers of a certain age even went through traumatic experiences of having to forcibly learn the language of the state, before an education system sensitive to their needs existed. "*Cuartelpin chay lieutenantkuna, capitankuna, mana munagkuchu runa simi rimanaykuta. 'Indios carajo! Castellano!', neqkun. Chhaynatan with a pure castellanota kick rimacheq kasunkikuclaskuna*" ("In the barracks those lieutenants, captains, did not want us to speak *runa simi*: 'Indians, damn it! Spanish!' they said. Thus, with a kick, they made you speak Spanish in classes") (Valderrama

and Escalante 1977: 45). A constant issue is the “shame” that Quechua speakers say they feel towards their language when they are in a Spanish-speaking environment (Howard 2007).

Thus, a certain ambivalence can be observed that contrasts pride and shame regarding their roots, their identity, and their languages. These positive/negative dimensions about what the agent feels in a given context justify, in my opinion, the postcognitivist approach to cognition as an adequate epistemological scaffolding. What native Andean speakers with Spanish as a second language feel is closely related to the social environment where they are located. The sociocultural context influences what agents experience because Quechua or Spanish is used depending on the place where they are at the time of the communicative act. For example, Ytusaca Quispe (2022) highlights that, as well as at home, women use Quechua in the market, with their friends, and with other people, as long as they can also communicate in the language. By contrast, men almost always speak it with their wives but not beyond that environment. In a similar study on the use of Quechua and Spanish, Falcón and Esquivel (2020) show that alternating between these languages is not specifically the speakers’ free decision, but is influenced by extralinguistic factors such as the place or situational context, the moment, the topic, and whether the interlocutor is someone close.

The Emotional Experience of Language within the Academic Context

As my investigation progresses, I have observed that it is common to “place” bilingual speakers of Andean languages within the opposition between educational (academic) and noneducational contexts. This is due, generally, to methodological issues and, more particularly, to the estimation of aspects of the speakers’ cultural identity highlighted by such contexts. Attending to this opposition allows us to analyze the scope and limitations that language has in the way we “see the world” (Deutscher 2010), interpreting it as an active instrument of coercion through which culture imposes its conventions. As a link, I use the outside–inside contrast in the academic context to examine if bilingual speakers feel persuaded to adopt certain points of view considering the interaction between their affective dimension and their particular situation.

With respect to the convenience of teaching and learning in Quechua or Spanish, Albarracín and Alderetes point out that some educational authorities affirm that there is no difficulty regarding linguistic diversity in the classroom, since “the work methodology consists of assimilation

to the dominant culture” (2005: 120). This implies that, in the academic context, Spanish prevails in the classroom. In this sense, and with the purpose of preserving and promoting minority languages intergenerationally both at school and in the family/community, Boix-Fuster et al. (1998) affirm that reinforcing these languages only at school risks resulting in institutionalizing them, but not in preserving them. It is therefore desirable to combine the efforts of schools and families to achieve the aforementioned purpose. Specifically in this respect, Hentschel (2016) considers the linguistic use of Quechua based on the above “as a cultural practice that gives life to a language and ensures its survival” (2016: 109). In this research, bilingual interviewees report a very limited use of Quechua within the university environment, although not in emotional, proximity, and/or trust contexts.

Coronel-Molina offers some testimonies about life stories showing that Quechua is established for family spaces and Spanish is established for school: “My father died when I was seven years old but I remember speaking Aymara with my mother about private things. I learned Spanish at school. The teacher told me: ‘Quechua for your house.’ That’s what the teacher told me and I never forgot it” (2005b: 229). This, in turn, reflects a characteristic of the ideology of mining unionism of the time, which turned it into a true center of Hispanization with the rejection of native languages and cultures.

This relationship between the native language and proximity contexts is also highlighted by Hirsch and Lazzari (2016). These authors note that the effective use of Guaraní, as a native language, currently occurs in different circumstances, such as work in the fields, soccer matches, town festivals, fairs, or street sales, but also when emotions intensify, as when there are fights or very great celebrations. Regarding the validity of the situation of Quechua–Spanish bilingualism among Bolivians residing in Jujuy, Postigo de Bedia and Díaz de Martínez (2001: 94) observe that in some bilingual speakers with little or no schooling, an affective component predominates, for example in the emotion, joy, or pleasure when conversing between farmers. Consequently, this reinforces their confinement in a ghetto and hinders their socialization in the host community.

In summary, these examples demonstrate the significance of the mother tongue when individuals interact and have emotional experiences with each other. In relation to my key question in cognitive terms, Taipe Campos emphasizes the emotional importance of the native language, stating that a “sufficient emotional, social and cognitive development takes place closely linked to the mother tongue” (1998: 2). In this

line, Cardenas Acuña (2016) aims to study the affective-emotional dimension of young children's psychomotor development in the Peruvian province of Acobamba. She proposes as a hypothesis that the main characteristics of incipient bilingual children's psychomotor development are present in the cognitive and affective-emotional dimension, while advanced ones have deficiencies in the motor and cognitive dimensions. As examined, the study argues that, in first-grade children, the problem is exacerbated because, in addition to the difficulty in learning the second language (Spanish), it is not directly taught during the initial three years of their education, thus hindering their integral education. This phenomenon, the Cardenas Acuña clarifies, "is a common denominator in rural areas that must be taken care of by the corresponding authorities; as we know, education is one of the ways out of the state of prostration in which the country finds itself with respect to the societies that are world powers" (2016: 15).

Within the framework of emotional cognitive competencies promoted at school, and in accordance with the phenomenon of language experience, Mella et al. (2016) note the context of social interaction in which such competencies are deployed. This research study examines diverse cultural and social situations involving Mapuche children, focusing on what happens to them emotionally when they express themselves in their own or a foreign language. These authors thus correlate the language, the affective dimension, and the cultural aspects by arguing that "discrimination and sociocultural domination, as a result of the colonialism established in the school, has generated, among the Mapuche, the loss of public use of their own language, the cultural models and emotional aspects" (Mella et al. 2016: 524). Taking into account the emotional guidelines expressed in language regarding what is expected or desirable in a social context, Chilean Mapuche students have faced a certain sociocultural domination. By virtue of such colonialism, for example, in view of the paradigmatic scenarios (de Sousa 1990), Mapuche speakers consequently limit the emotional richness that the use of their own language implies.

Of course, for each and every one of the situations described, instances are discussed to remedy them, such as the "intercultural curriculum" (Quintriqueo et al. 2014). The latter would allow not only improving school practices in intercultural contexts, but also avoiding emotional conflicts in correlation with ethnic identity. In this regard, based on children at the initial educational level, Huamani (2019) proposes the use of songs in Quechua to awaken their interest and emotions, and, in

the same way, allow them to express themselves freely in their language. When songs are used in the second language, children are unable to connect with it, because they do not understand them and in some cases they remain silent. Teachers are aware that Quechua is a main element for providing good educational training, since it influences students and helps them learn.

The Classical Cognitive Approach/Decontextualized Learning vs the Postcognitivist Approach/Anchored Learning

As shown in the second section, there are some differences between the cognitivist and postcognitivist approaches to cognition in addressing the emotional experience of language. Now, in relation to this description, I associate it with what happens within the educational field, since, as developed in the previous section, this is where the most research on bilingual speakers has been conducted and where emotional differences are more prominent when choosing to use the native or foreign language.

Indeed, the literature on the postcognitive approach to cognition includes several concepts from the educational context, such as “situated teaching,” “situated learning,” “anchored instruction,” “situated cognition,” and “distributed cognition” (Calvo and Gomila 2008). As a consequence of addressing the conjunction between the educational field and the postcognitivist approach, I highlight the possibility of reconsidering those educational practices where the learning of bilingual speakers of Andean languages is decontextualized and/or isolated and of promoting, on the contrary, the interaction of students with their immediate cultural context.

Let us first return to some characteristics of the classical approach to the cognitive sciences, but this time focusing on the way students learn. As already mentioned, the classical approach, unlike the postcognitivist one, places the mind (only) in the head (without recognizing its relationship with the body and even less with the context) and mechanizes it: the functioning of the mind and brain can be reproduced in a machine. By considering the body as an artifact directed by a mind, this approach does not acknowledge the intelligent behavior of learners as a cognitive activity that extends *outside* the brain through the interactions between the body and the world (context) (Lindquist et al. 2012). Regarding the investigations on educational practices with bilingual students, it could be inferred that learning in this way is individual, solitary, and passive,

seen only as a process of transferring and receiving information, where the affective dimension of students is not relevant. These practices thus promote declarative, abstract, and decontextualized learning, which is also inert, of limited social significance, use, and motivation (Díaz Barriga and Hernández 2002). The knowledge obtained is independent of real-life situations or social practices of the students' culture, which may explain, in bilingual speakers, the choice to use their foreign language at school.

Although with different nuances, the principal characteristics of the postcognitivist approach emphasize the role of context in our mental processes. In relation to how students would learn from the postcognitivist perspective in combination with the educational field, the interaction and dynamics of teaching/learning processes and the context in which they develop are key (Bereiter 1997; Engeström and Cole 1997; Lave 1997; Rogoff 1992). From this new theoretical point of view, cognition can no longer be considered statically, as the classical approach indicates, nor can it be explained independently of its own doing, since intelligence is conceived as the ability to interrelate with a context, and not just to solve a problem.

As regards my key question, as a "theoretical turn," research on the emotional experience of bilingual speakers should be readdressed within the postcognitivist approach to cognition. After all, the reviewed investigations show that students are "dis-situated" or decontextualized from their cultural environment, which ultimately influences their affective dimension. By not taking into account the theoretical contributions of the postcognitivist perspective, we may remain trapped within the classical approach to cognition. Therefore, we would solely adhere to the (static) cognition of education without critically considering the role we give to the environment in such educational proposals, consequently promoting decontextualized and isolated learning, with the cultural repercussions that this entails.

Conclusion

Although questions about the meaning of emotions are ancient, and the debate about their nature persists in the scientific literature, elucidating the phenomenon of the emotional experience of language has allowed us to focus on how people use words to name emotional experiences, which, in turn, varies systematically across cultural groups. Through

a postcognitivist approach, I have concentrated particularly on native Andean speakers with Spanish as a second language, with the aim of recognizing the importance of the emotional component of language.

As a result of my analysis, I have indicated the path that opens from an incipient and novel proposal within the cognitive sciences, namely the postcognitivist approach. Attending to the academic context and, with it, educational practices, this work has promoted the usefulness or functionality of what has been learned in real settings (learning *in situ*), highlighting the role of the students' environment. Indeed, the context provides an adequate scaffolding from which students can fully develop their affective skills, in addition to their cognitive and psychomotor ones. It would be interesting to investigate what happens in different scenarios where various emotions are channeled. What language does a bilingual speaker use when dreaming, declaring love, cradling a child, and talking to pets?

Finally, and taking into account the difference between using the native language and a foreign one, it seems appropriate to end my chapter with this quotation: "If you address a person in a language they understand, those words will go to their head, but if you do it in their native language, the words will reach their heart" (Ivaz, Costa, and Duñabeitia. 2016: 494).

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CHAPTER 9

On the Ontological Diversity of Language in Indigenous South America

Jan David Hauck

Bringing Southern epistemologies into dialogue with those developed in the halls of Northern academe inevitably involves confronting the diversity of languages in which these epistemologies are articulated. Philosophical concepts from the Global South are expressed in local languages and we should not assume them to be necessarily commensurable with their translational counterparts in European languages. Even fundamental concepts such as those captured by the English nouns “knowledge” and “understanding” have been shown to be variable over history and in their various translations across geographic regions (Lloyd 2012; Stich and Mizumoto 2018; Wierzbicka 2018). Such variability has a bearing on any philosophical reasoning that makes use of these concepts. Thus, an “epistemology for the rest of the world” must put the question of “concept identity and cross-linguistic meaning identity” (Stich and Mizumoto 2018: xii) at the center of inquiry.

The present volume focuses on the Indigenous Americas, more specifically on the South American Highlands and Lowlands, a region well known for its remarkable linguistic diversity at various scales. There are areas with extensive multilingualisms such as the Upper Rio Negro region (Epps and Stenzel 2013) or the Xingú National Park (Franchetto 2011) in which multiple languages from different language families are

spoken in close proximity and even within the very same communities and households. In turn, closely related languages or varieties are spoken across vast territories: varieties of Quechua/Kichwa are used across the Andes, whereas mutually intelligible Tupi-Guaranian languages stretch from the Rio de la Plata basin all the way up to the Caribbean.

Communities also exhibit a diversity of forms of discourse, including song languages, ritual wailing, registers reserved for use with specific people, such as affines or pets, or for particular activities, such as hunting or gardening—encompassing what linguists usually describe as registers, styles, genres, or lects (Epps 2021; Sherzer and Urban 1986). Conversely, there is widespread areal similarity of such forms of discourse across regions, such that remarkably similar forms of singing, wailing, or ceremonial dialogues are found in communities otherwise speaking very different (sets of) languages (Beier, Michael, and Sherzer 2002). These dimensions also intersect in multiple ways, for instance, in that songs and shamanic registers in one community may contain elements that can be traced back to the (everyday) languages spoken in another community (Fausto, Franchetto, and Heckenberger 2008; Seeger 1987; Townsley 1993). Therefore, when using the term “language” throughout this chapter, I intend it to encompass communicative phenomena in all of the above dimensions—not only what in the ideologies of European nation states would be considered “languages.”

Anyone grappling with Amerindian approaches to knowledge and understanding must take this multidimensional linguistic diversity into account, as many of the chapters in the present volume do. In a Whorfian spirit, some focus on one or the other linguistic feature and how it impacts the expression of knowing, learning, or understanding. Speakers of the Matsigenka language, for instance, associate knowing and transmitting knowledge with particular body parts, which is reflected grammatically in an obligatory system of prefixation of learning and teaching verbs (Fleck, this volume). Matsigenka also has a complex system of evidentiality (Fleck 2007), as does Quechua (Quintanilla, this volume), obliging speakers to mark the sources or timing of the information reported. Other chapters discuss specific discourse genres associated with specific knowledge practices. A Cofán shaman, for instance, learns/knows (*atesuye*) from invisible *cocoya* beings who speak to him in their own *coco* language. The shaman, in turn, mimics this language in his curing chants. Cofán shamans’ knowledge practices are thus tied to a specific discourse genre, derived from and used to communicate with *cocoya* beings (Cepek and Lucitante, this volume). Similarly, to enhance their hunting success,

Shuar hunters rely on *anent* songs, a specific genre of song which at the same time is a kind of embodied technology that enables a hunter to know his prey (Barrett, chapter 10, this volume).

Ethnographically informed cross-linguistic inquiries into concepts and practices of knowing such as these dramatically expand our perspectives on epistemology. And yet there is one dimension of diversity that has heretofore remained unexamined: that of the concept of language as such. The very idea of variation of epistemological concepts that we are trying to examine by looking at the ways in which different knowledge practices are expressed in different language communities presupposes the commensurability of these expressions insofar as they are all formulated in one language or another. That is the basis for comparison in the first place. *Knowledge* is a word in the English language. And other languages have other words that may come fairly close to what English speakers mean when they use the word *knowledge*. And very soon, whether in dictionaries or in conversation with native speakers, we encounter words such as *yachay* in the Quechua language, *tantia* in the Matsigenka language, and *atesuye* in A'ingae, the Cofán language. We don't expect them to be used in the very same way, whether semantically or pragmatically. Translation is transformative as referents "change their nature" (Hanks and Severi 2014: 8) along the way. It is precisely their intensional and extensional differences that make them so interesting for epistemology. However, each of them remains a token of the (English) concept of "word," a part of (the English concept of) "language." We take the "concept identity" of language for granted.

If we allow for the possibility of different understandings of epistemology, of different concepts of knowing, should we not also allow for the possibility of *different understandings of language*? The point is not only to ask *what knowledge is*, and the study thereof, for speakers of Indigenous languages. Rather, we should pair this inquiry with the question of *what language is* as conceptualized in Indigenous epistemologies (Hauck and Heurich 2018). This chapter attempts an outline of what such an inquiry could look like in relation to the ethnographic realities of the continent to which the present volume is dedicated.

The inquiry is an ethnographically holistic one, taking into account not just beliefs about "language" that different communities hold, their language ideologies (Kroskrity 2015), but also the ethnohistorical, cosmological, and ontological foundations on which these rest. Indeed, as we will see in what follows, any description of linguistic diversity and multilingualisms in Indigenous South America remains incomplete

without a deeper understanding of the ethnographic realities that they are part of (Epps 2021).¹ Taking seriously the implications that such realities have for local understandings of language, however, requires us to first scrutinize the purported universality of the concept.

Language: A Human Universal?

That language is a human universal seems to be an uncontroversial fact. Language is understood to be the core trait that differentiates us from nonhuman animals as well as one of the primary means by which humans differentiate themselves from one another (Enfield, Kockelman, and Sidnell 2014: 1). Controversies exist about the particular features that are singled out to account for human uniqueness: Is it speech, vocal learning, recursion, or the use of symbols? Since it has been difficult to find a single trait that would hold the key to understanding the qualitative difference of human communication (Fitch 2017), some question the fact that there even is such a trait (Lieberman 2000) or take the difference to be quantitative rather than qualitative (Hauck 2021). But most would agree that there is something about the whole bundle of features of human language that is unparalleled by any nonhuman communication system (Hockett 1960).

There is also disagreement concerning linguistic diversity. Would a hypothetical Martian scientist after thorough examination of all the world's languages "find the variation rather superficial, concluding that there is one human language with minor variants" (Chomsky 2000: 118)? Or would they find variation to be the defining feature of language that sets it (and us) apart as "the only known species whose communication system varies fundamentally in both form and content" (Evans and Levinson 2009: 431)? And yet, irrespective of whether linguistic diversity is taken to be a minor or major fact, there is general consensus that the multiple languages or ways of speaking that we can observe in communities around the world, no matter how similar to or different from one another, are all instances of the same phenomenon: language. As human practices, all languages are ontologically equivalent.

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1. In a similar spirit to the present inquiry, Epps (2021) makes a forceful argument for the importance of an ethnographically grounded understanding of Indigenous multilingualisms in South America, albeit without discussing the implications that these have for the concept of language itself.

Contemporary scholars of different theoretical persuasions also largely agree that the diversity of human languages is the outcome of the different histories of human communities. Over time, languages split and others converge as the result of population movements and speech communities in contact. It has become commonplace to claim that “named” languages—the kinds of things that take labels such as English, or Spanish, or Quechua—are “social constructions.” At bottom, this is simply an extension of the understanding of language as symbolic communication. Symbols are conventional—or “arbitrary,” in Saussurean ([1916] 2013) parlance—signs, as opposed to iconic or indexical ones (Peirce 1992). Conventions differ from one speech community to the next. Therefore, the particular words that are chosen for particular referents, and where boundaries are drawn between bundles of words believed to make up distinct languages, must be arbitrary as well. Languages are matters of social agreement of a community of users or, in the case of state-sanctioned standard varieties, of political imposition. Claims about the social construction of language are usually made in response to language ideologies that posit some sort of essential connection between a given language, a people, and a country—beliefs that a particular language has some kind of “essence” that makes it particularly appropriate for the expression of a national or cultural identity. Linguistic practices that differ from standardized forms, including so-called dialects or practices of mixing (Hauck and Mitsuhara 2023), are often derided as deviant, expressing and reinforcing the racial or social stereotypes attributed to their speakers. Emphasizing the social constructedness of all languages and language boundaries can help counter such ideologies.

In short, we generally assume a fundamental nonequivalence of the communication systems of humans and nonhumans and a fundamental equivalence of all human languages, taking distinctions between them to reside in the realm of ideologically mediated human practice. And yet, when we turn to a cross-cultural examination of this purportedly universal human trait, when we begin studying different conceptions of what language is, we find that many of them do not share the above-mentioned characteristics. For many Indigenous people, language is *not* what differentiates humans from nonhumans (Vilaça 2016: 59). Different languages are *not* ontologically equivalent, that is, they are not instances of a general phenomenon, language, but rather fundamentally different kinds of things (Course 2018). And frequently we encounter claims that a given language is some kind of bodily essence, connected to speakers in a very real, material way (Chernela 2018). Moreover, there are many

languages across the world in which the English noun “language” has no corresponding equivalent (Hauck 2018; Heryanto 1990). While it seems the case that everywhere people have ways of talking about what others are talking about (Lucy 1993), often with the help of verbs of speaking (e.g., say, tell) or evidential morphemes (San Roque 2019), “language,” in the sense above, seems to be something very peculiar to the European intellectual tradition.

In this chapter, I will challenge such European assumptions about language by putting them into conversation with those of Amerindian communities. I will use the concept of *linguistic natures* (Hauck and Heurich 2018): ontological presuppositions about language as they are articulated in cosmological understandings and surface in the discursive practices of a variety of Amerindian communities. The concept is designed to capture that there may be important differences in the “nature” of language, which the pluralization of the noun nature to natures tries to highlight. This focus goes beyond language ideologies. We should not merely be concerned with different “beliefs” about the same thing, language, and rather explore differences of what language itself might be.

I should clarify up front that when comparing Amerindian and European linguistic natures, I do not wish to suggest that there is but one singular nature of language in Amerindian communities that is radically distinct from the European one. Elsewhere (Hauck 2023), I have argued that there are ontological distinctions within as well as across communities, groups, and regions, and that the most fruitful avenue of inquiry would be to think in terms of multiple axes of differentiation (Gal and Irvine 2019). And yet, upon closer examination, we will also note some parallels in the linguistic natures of different discursive phenomena that are shared by many different groups across the continent—parallel to other areal phenomena (Beier, Michael, and Sherzer 2002). Therefore, my goal in this chapter is also to try to understand the foundations of these commonalities—and how they may be relevant for our foray into Amerindian epistemologies. I will begin my exploration of Amerindian natures of language with a discussion of accounts of the origin of language as they fit into the broader cosmological realities of the continent.

Origins of Language and Linguistic Diversity

Throughout the ages and across continents, humans have been pondering about language. Where does it come from? What is unique about it?

What accounts for the different incomprehensible ways of speaking of different communities? There seem to be far more accounts of the origin of linguistic diversity than there are of the origin of language itself. And yet both of these questions are intrinsically connected.

At first sight, explanations for the origin of the different languages out of a primordial single tongue seem to be very similar across otherwise very different mythological traditions around the world (Frazer 1918: 382–87). At some point in history a primordial linguistic unity was disturbed by a transformative event, involving a quarrel or discord among humans in some cases, human disobedience in others, like breaking a food taboo or trying to reach the heavens by building a ladder or a huge tower. This then caused the intervention of a god, a trickster, or some other powerful figure, who would confuse the human tongues. Perhaps most memorably articulated in the Tower of Babel myth (Genesis 11:5–8), there are many strikingly similar accounts from different regions across the globe, all of which result in people ceasing to understand each other and dispersing across the earth to live in different communities. In many traditions, the origin of different languages is thus linked to geographic separation of human communities and distinct histories and customs.

However, the wide distribution of the Tower of Babel motif and the similarities of the different accounts that comparison reveals should not lead one to think the explanation for linguistic diversity is essentially the same everywhere. A closer look at different narratives reveals crucial differences, showing that the end of linguistic unity meant something quite different in different parts of the world. They diverge on the foregoing event that led to the confusion of tongues, on the intervening agent, or, most importantly, on the extent of the community upon which it was inflicted. While in the Bible the original condition seems to have been that all of humanity spoke the same language (Genesis 11:1), elsewhere the primordial linguistic community is reported to have been much greater. In the Indigenous Americas with which we are concerned here, humans lost the ability to communicate not only with each other, but also with nonhumans—or, rather, with what the Western tradition sees as nonhumans.

For the Amerindians and most of the peoples who long remained without writing, mythical times were those when human beings and animals were not really distinct from one another and could communicate. These groups would have seen the decision to make historical

time begin with the Tower of Babel, when humans lost the use of a common language and ceased to understand one another, as the expression of a singularly narrow view of things. The end to an original harmony, according to them, occurred on a much vaster scale; it afflicted not only humans but all living beings. (Lévi-Strauss [2013] 2016: 112)

Amerindian and European intellectual traditions seem to have very different understandings of language. For Europeans, whether spelled out in biblical accounts or by modern scientists, language is the core trait that distinguishes humans from nonhumans. In the Bible, humans had language from the very start—after all, it was Adam who named all the animals after they were created (Genesis 2:19–20).² Linguistic diversity resulted much later from the fall of the Tower of Babel (Genesis 11:5–8). By contrast, for Amerindians, linguistic differentiation not only happened to humans who had already been distinct from animals, but it was part and parcel of speciation. The origin of linguistic diversity is thus intimately tied to the origin of species, human and nonhuman.

Ontological Differentiation

Depictions of the origin of humanity as the diversification out of a primordial unity of (pre)humans and (pre)nonhumans is a leitmotif of Indigenous cosmologies across the Americas. It can be summarized as follows: In ancient times—or before there was time (Overing 1990: 607)—the ones who were to become humans shared essential characteristics with those who were to become nonhumans: animals, plants, gods. The myths differ regarding the beings contrasted. Some explain speciation, others the separation of humans and gods, still others the origin of differences of ethnic groups, but all share the basic principle by which social and biological diversity is explained: as the result of transformations of an original state of nondifference. The general theme is that of the unequal twins analyzed by Claude Lévi-Strauss ([1991] 1995) in

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2. Whether or not animals were capable of language in the biblical paradise is subject to debate—at least the serpent must have had language when speaking to Eve. However, it is unambiguous that their creation was separate from and prior to that of humans; they did not diversify from prehumans by losing language.

The Story of Lynx, the organization of the world in terms of an unstable dualism that leads to series of progressive transformations.

Following Lévi-Strauss, Philippe Descola ([2005] 2013) and Eduardo Viveiros de Castro (1998) have argued that the assumptions underlying such myths are diametrically opposed to those common to the European philosophical and scientific traditions. Whereas the latter assume an evolution out of a primitive state of animality, where humans and animals share a basic “nature”—the former having developed special capacities that the latter are lacking, including language—in Amerindian accounts the original common condition is not animality but humanity. Their presently observable differences are to be accounted for through a series of transformations through which animals acquired the bodies that now define them. In both accounts, humans and nonhumans share common ancestors, but the original condition and subsequent transformations are imagined in completely different ways.

The ontological consequences of these two origin stories are radically distinct orders of things. Descola ([2005] 2013) conceptualizes these as different relations of continuity and discontinuity between “interiorities” and “physicalities.” Inspired by the phenomenological distinction of intentionality and body (Husserl 1956), the attribution of an intentionality or body different from or similar to one’s own results in different modes of identifying these beings.

Modes of identification common to European modernity are based on the perception of a continuous physicality (“nature”)—humans and nonhumans are made of the same matter—paired with discontinuous interiorities—they do not have the same soul/mind/intentionality. Descola calls this naturalism. By contrast, in modes of identification such as those common to South America, nonhumans are perceived to have an interiority similar to humans—they have the same soul/mind/intentionality—but physicalities that are discontinuous—they have different bodies. Descola calls this animism.³

Viveiros de Castro (1998) has illustrated differences between naturalism and animism by contrasting the naturalist assumption of a single continuous nature with what he calls multinaturalism, to describe

3. Animism and naturalism are only two out of a total of four modes of identification in Descola’s model, the other two being totemism and analogism, but since I am less interested in the model and only in what it can tell us about the Amerindian context in particular, I will not discuss them here.

animist ontological presuppositions. While the Western multiculturalist ontology is founded on the unity and objective universality of nature over against a plurality of cultures, the subjective particularities of meaning, multinaturalism presupposes a universal identity of subjectivities of all human and nonhuman entities inhabiting the world, where differences between species are grounded in corporeal diversity: “a representational or phenomenological unity ... indifferently applied to a radically objective diversity. One single ‘culture’, multiple ‘natures’” (Viveiros de Castro 1998: 478).

The Bifurcation of Language

In light of these ontological assumptions, it is not surprising that linguistic differentiation is conceptualized in Amerindian cosmologies as occurring on a scale that included humans and nonhumans. But such framing is also not quite accurate, as there was no distinction between humans and nonhumans to begin with: linguistic differentiation afflicted *prehumans* and *prenonhumans*.

Myths are filled with beings whose form, name, and behavior inextricably mix human and animal attributes in a common context of intercommunicability, identical to that which defines the present-day intrahuman world. (Viveiros de Castro 2004a: 464)

In those days, animals and plants were masters of all the skills of civilization, communicated with one another with no difficulty, and abided by the major principles of social etiquette. As far as one can tell, their appearance was human, and only a few clues, such as their names and their strange behavior, indicated what they were to change into. Each myth tells of the circumstances that led to a change of form and of the actualization, in a nonhuman body, of an animal or a plant that up until then had existed in a state of potentiality. (Descola [2005] 2013: 131–32)

Speciation resulted in distinct plant and animal bodies, and when the original (pre)animals “lost their human form, they also, ipso facto, lost their speech organs and therefore the capacity to express themselves in spoken language” (Descola [1986] 1994: 93). Here, language is a part of the body, of physicality, of that which differentiates humans from

nonhumans, and different nonhumans from one another. As Descola reports from the Achuar,

each animal species has its own language, which was assigned to the species when it acquired its final form. ... Moreover, each species can express itself only in its own language although humans are capable of imitating other animal sounds and use these, for instance to lure or to reassure the prey they are stalking. Nevertheless, and unlike the various human languages, of which the Achuar are aware, languages that translate into one another and permit an exchange of meaning providing one has mastered them, animal languages can be reproduced by voice or by a game call, but cannot be used to converse. (Descola [1986] 1994: 99)

And yet, while cross-species communication is not straightforward, it is still possible. This is because, in the process of acquiring distinct physical forms, different species have still “preserved the faculties that they enjoyed before they split into different species. These faculties were subjectivity, reflective consciousness, intentionality, the ability to communicate in a universal language, and so on” (Descola [2005] 2013: 132; see also Taylor 1993a, 1993b). This is why we have so many reports from Amerindian communities that assert that “it is not language that differentiates beings but their bodies,” as Aparecida Vilaça (2016: 27) writes about the Wari’. Language is never mentioned as an obstacle to communication in “encounters with humanized animals, whether mythic or historic” (Vilaça 2016: 60). From their shamans, the Wari’ know that “animals speak the same language as themselves ... although they can be comprehended only by those who can ‘hear’....what they say, a capacity that depends exclusively on the social relations established between them, especially living and eating together” (Vilaça 2016: 59).

This description suggests that language is *also* an aspect of interiority and an invariant that is continuous across species. Here, language is *not* tied to different bodies but rather exhibits a formal unity of language at a general level. On this level, the Saussurean distinction between signifier and signified is inverted: different signifieds are referred to by the same signifier depending on the perspective of who makes the enunciation, “a constant epistemology and variable ontologies, the same representations and other objects, a single meaning and multiple referents” (Viveiros de Castro 2004b: 6). Language here would be something that is radically unlike the common Western assumption of a system of symbols. While

separable in principle from their referents, words are nonarbitrary and nonsubstitutable, semiotically fixed but semantically multivalent.

Language thus seems to be divided against itself. On the one hand, it is the common condition of all beings, human and nonhuman, an invariant across species, a part of their interiority. On the other, it is the diacritic that differentiates species, together with their bodies and other habits. To understand this apparent paradox, we must explore the role of language in relations with others in South America.

The Languages of Others

Much has been written about the centrality of alterity for Amazonian collectives. Whether to maintain a healthy body on the level of the individual or to reproduce the group as a whole, it is paramount for Amerindians to maintain relations with and incorporate elements from a variety of others, ranging from affines, enemies, and white people, to animals, the dead, gods, and a myriad of forest spirits. The vitality, power, knowledge, or identity of such others can be captured through predation, warfare, and shamanic ritual and then incorporated into the group through practices of familiarization by feeding and eating together (Fausto 2007; Vilaça 2002).

Practices of relating to others have a bearing on the medium of communication. A widely discussed phenomenon in many Amerindian communities is the ubiquity of ideophones. Prominently explored in the work of Janis Nuckolls (1996, 2010) on Runa sound symbolism, far from merely quoting the sounds of a being or action in reported speech, the use of ideophones allows speakers to inhabit the perspective of other beings. “By voicing the dynamic nature of sensory experiences, speakers are ... able, momentarily, to become what they imitate, thereby expressing the perspectives of nonhuman beings according to their sounds, movements, appearances, and energies” (Nuckolls 2022: 298). The use of ideophones is one example of more general practices of imitation that Francesca Mezzenzana (2018) analyzes as forms of “becoming alike”—the temporary and always incomplete transformation into a different kind of subjectivity, which is central for many kinds of learning and knowledge acquisition, including hunting, gardening, or pottery making. As Casey High (2018: 71–72) describes for the Waorani, “ideophony marks a shift in perspective whereby the hunter temporarily ‘becomes’ the hunted.”

However, as Mezzenzana (2018: 244) observes, this “becoming alike” also carries a certain danger. As a necessary epistemic practice of

knowing the other through temporary transformation, imitation always involves the ontological risk of fully becoming other—variously experienced through soul-loss, illness, or death—sometimes permanently. As I have discussed above, every being, independent of its actual form, is potentially a person, a human endowed with subjectivity—which is what makes inhabiting other perspectives possible in the first place. One’s own position as human (subject) depends on one’s relational status vis-à-vis other beings. That status is not guaranteed. In order to maintain a human subject position, Amerindians must take great care to keep ontological boundaries intact and distinguish themselves from nonhumans (Fausto 2007; High 2018; Lima 1999; Taylor 1993b; Viveiros de Castro 2004a), that is, “to disconnect entities, which are in a certain way already connected” (Course 2013: 307).

If a human who is not a shaman happens to see a nonhuman (an animal, a dead human soul, a spirit) in human form, he or she runs the risk of being overpowered by the nonhuman subjectivity, of passing over to its side and being transformed into an animal, a dead human, a spirit. A meeting or exchange of perspectives is, in brief, a dangerous business. (Viveiros de Castro 2004a: 468)

Responding to someone’s interpellation when that someone is a member of a different species could result in the subject’s abduction into that species. Language is not transparent since the same words uttered by different beings may belong to different worlds (Course 2013; Kohn 2013; Overing 1990; Taylor 1993a; Vilaça 2002, 2016). Therefore, in order to avert the potential dangers that such encounters with others imply, to successfully communicate across species boundaries without crossing them, the medium of communication is modified—which may be one of the sources for the diversity of genres or registers that we find across the region.

There are many examples of specific forms of discourse designed for cross-species communication, most of them markedly different from the languages used in everyday conversation (Basso 1985; Carneiro da Cunha 1998; Cesarino 2011; Clastres [1974] 1987; Descola [1986] 1994; Graham 1986; Heurich 2015; Seeger 1986, 1987; Severi 2002; Townsley 1987, 1993; Viveiros de Castro [1986] 1992; Walker 2013). Michael Cepek and Cesario Lucitante (this volume) discuss the shamanic chants used to communicate with *cocoya* beings. Clark Barrett (chapter 10, this volume) analyzes the *anent* songs of Shuar hunters (see also Taylor 1993a). The Runa in Ecuador speak to their dogs in what

Eduardo Kohn (2013) calls a “transspecies pidgin,” containing grammatical modifications, while also tying the dog’s snout to prevent it from talking back—after all, “the Runa do not want to become dogs” (Kohn 2013: 144–50, 213–16).

Whatever the particular shape in which they come, all of these languages activate the universal plane of shared intercommunicability that is given by the common origins of different species.

Intersubjectivity can be expressed by speech from the soul, which transcends all linguistic barriers and transforms every plant and animal into a subject capable of producing meaning. Depending on the way in which communication is to be established, this soul speech can take any of a number of forms. Normally humans speak to plants and animals by means of incantations, which are supposed to go straight to the heart of whoever they are addressed to This sort of sung metalanguage is also used by various species of animals and plants to communicate with each other, thus overcoming the solipsistic curse of separate languages. (Descola [1986] 1994: 99)

Thus, while the everyday languages of humans and nonhumans are indeed an aspect of physicality such as the body and its dispositions, song languages, iconic forms, and otherwise modified forms of speech can access those aspects of subjectivity that are continuous across species.

Does the answer to the paradox mentioned at the end of the previous section lie in these different linguistic forms? Some forms of discourse are used for everyday interaction with kinfolk and other community members. Other forms are reserved for the world of interaction across ethnic and species boundaries, associated with shamanism, ritual action, as well as hunting and gardening. The former are what linguists used to study. The latter come in the form of ideophones, songs, chants, and other ritual forms of discourse. Does this hold the key for both, Amerindian multilingualisms as well as large-scale areal similarities? Running with this interpretation for a moment, let us consider in more detail how exactly these different languages are different.

The Materiality and Agency of Language

Communication with others is often a task that is left to shamans, as they are the only ones able to safely cross communicative boundaries

and “adopt the perspective of nonhuman subjectivities in order to administer the relations between humans and nonhumans” (Viveiros de Castro 2004a: 468). This adopting of other perspectives is not merely a kind of empathic understanding of others’ points of view. Rather, it is an embodied way of partially and temporarily becoming other. For instance, shamans among the Arawete (Heurich 2015, 2018; Viveiros de Castro [1986] 1992) or among the Marubo (Cesarino 2011) invoke the dead or other spirits through their songs. This does not mean that they would talk *with* the dead or *to* them, nor is it a form of “reported speech,” conveying a message from the dead. The dead themselves manage to speak through the shamans, appropriating their speech organs. The shamans’ bodies become a type of extension of the bodies of the dead. Shamanic speech here does not “represent” a nonhuman subjectivity but that subjectivity “re-presents,” that is, manifests itself in it.

Thus, communication across ontological boundaries does not only involve a modification of semiotic form—it changes the nature of the communicative medium itself. In their *koshuiti* (songs), Yaminahua shamans refer to things not by their real name but by “metaphoric circumlocutions or unusual words for common things which are either archaic or borrowed from neighboring languages” (Townesley 1993: 458). These “twisted words,” as they call them, are necessary for two reasons. First, they enable the shamans to attain clarity in their visions. “With my *ko-shuiti* I want to see—singing, I carefully examine things—twisted language brings me close but not too close—with normal words I would crash into things—with twisted ones I circle around them—I can see them clearly” (quoted in Townesley 1993: 460). But it is not only the clarity of vision that makes this twisting necessary. For the shamans, songs are “vehicles for communication with the animate essences upon which their practice depends” (Townesley 1987: 16), the *yoshi* spirits, and by twisting their language they are able to establish a metonymical connection with these and can therefore effect material change in a patient who is suffering from a given illness.

Yoshi are real beings who are both “like and not like” the things they animate. They have no stable or unitary nature and thus, paradoxically, the “seeing as” of “twisted language” is the only way of adequately describing them. Metaphor here is not improper naming but the only proper naming possible. The whole strategy of the song is precisely to drag these refractory meanings and images of the *yoshi* world out into

this one and embed them unambiguously in a real body. (Townesley 1993: 465)

The words of the song do neither symbolically stand for their objects nor metaphorically for different objects; they also do not indexically point to them or the world to which they may belong. Rather, they establish a physical connection with their object, and it is from this connection that the power of the songs stems (see Carneiro da Cunha 1998; Heurich 2015; Severi 2002). After all, shamanic practice is not about “magically influencing the world through discourse but rather changing it and the enunciating subject” (Cesarino 2011: 21; see also Cepek and Lucitante, this volume).

This “magical power” (Tambiah 1968) of shamanic words stems from the fact that their nature is different from those of everyday conversation. Magical words are able to have material effects on the world because they themselves are a material substance, often in liquid form. Among the Urarina in the Peruvian Amazon, for instance, a particular class of healing chants called *bauu* are considered a type of fluid (Fabiano 2015), which enables them to enter the body of a patient together with other liquids, such as a bowl of milk, into which they are spoken before being ingested. Inside the patient’s body, the words spread out and “paint” or “dye” the blood, which alleviates the symptoms (Walker 2018: 16). This is a physical process not an interpretive one. “Words are considered to be subject to direct absorption by the body, rather than interpretation by the mind” (Walker 2018: 16). Language here does not represent the world—it is an intrinsic part of it.

Whether in shamanic ritual or in everyday practices of hunting and gardening, languages are distinct not only in form but also in nature. It might be tempting to conclude, then, that across the region there are two distinct linguistic natures, one for everyday conversation among kin and the other reserved to administer cross-species relations. It would fit well with the Amerindian cosmological theme of ontological bifurcation discussed above. And yet I believe that the rich ethnographic data from the continent suggests otherwise. It is true that many Amerindian collectives teach us that there are different worlds, different ontological realms that call for different forms of interaction. But to try to fit these into a simple dichotomy between an everyday world and a shamanic world, each associated with distinct linguistic natures that neatly map onto distinct discourse genres or languages, does not do justice to the wide variety of cosmologies

and the complexities of relations across ontological boundaries in the region.

Let us consider the case of Mapuche communities in Southern Chile as reported in the work of Magnus Course (2012, 2018). At first sight, the two languages, Mapudungun and Spanish, seem to fit the model described above quite well. While Spanish is an arbitrary medium of symbolic representation used in everyday conversation, Mapudungun is contiguous with *newen*, the force that is constitutive of all being and associated with ritual and ceremonial discourse (Course 2012). As Course (2018) puts it, the two languages are “ontologically nonequivalent.” Even their names seem to suggest as much. The term the Mapuche use for Spanish is *winkadungun*, the *dungun* “language/speech” of *winka* “white people.” By contrast, *mapudungun* is the *dungun* of *mapu*, the land itself. They are different kinds of things. However, Course (2018: 13) also suggests that the relationship of language with force may be applicable to Spanish, even though Mapudungun is undoubtedly “more embedded in the flow of *newen*.” And Harry Walker (2018: 16) observes that for the Urarina, words can have “a greater or lesser degree of materiality, as well as force or instrumentality, depending on the context.”

Moreover, a material nature of language is not only attested for ceremonial and ritual languages. One example comes from the Upper Rio Negro region across the Colombian and Brazilian borders, known for “linguistic exogamy,” the proscription to marry someone speaking the same language (Jackson 1983; Sorensen 1967). Usually this phenomenon is understood as a classic example of indexicality—of different ways of speaking indexing different speaker identities. Based on her ethnography among the Tukano/Kotiria, one of the groups in the area, Janet Chernela (2018) offers a different interpretation. Language, she suggests, is not just a “practice,” but a corporeal substance, a material component of the person shared with one’s paternal kin. And exogamous marriage rules proscribe marriage with someone speaking the same language/substance.

And yet even in this case, there are further nuances to consider. As Stephen Hugh-Jones (2021, 2023) explains, the substantial and agentive nature of language is a matter of degree that applies especially to songs and flute music. “The more esoteric, rhetorical, musical, or visual ornamentation is given to breath, the more substance, vitality, and strength it possesses. This means that language and speech are not things owned by groups, but that they are rather what constitutes the strength, vitality,

soul, and very existence of those groups” (Hugh-Jones 2023: 300; see also Echeverri 2023, Savoldi 2024).

Conclusion

What the foregoing examples show is that the diversity of languages or forms of discourse and the diversity of conceptualizations thereof, whether explicitly formulated or embedded in practices, disclose multiple axes and degrees of ontological differentiation. On the broadest level, we can say that there is something fundamentally different about conceptions of language or speech in Amerindian communities when compared to Western or European understandings. This is apparent when we analyze different accounts of the origins of language, humans, and nonhumans but also in regard to general understandings of the materiality, agency, or force of language that is widespread across the continent. At the same time, there are fundamental distinctions within individual communities, whether between different languages, such as Spanish or Mapudungun, or between ritual and nonritual forms of discourse, song languages, twisted words, transspecies pidgins, and other kinds of genres, registers, or lects. These distinctions are ultimately grounded in the continuous aspects of interiority or subjectivity and discontinuous aspects of physicality or body that are characteristic of animist modes of identification (Descola [2005] 2013). And yet they are often matters of degree and of perspective, whereby certain forms have higher levels of agency or materiality than others and whereby certain continuities of Indigenous languages with the world also come to affect colonial languages.

That ontological distinctions between different languages or forms of speech are not set in stone and are often matters of degree is not surprising if we take into account that the ontological status of entities in general is not a given but something that must be constantly reaffirmed. This is perhaps the most important difference between Amerindian and European intellectual traditions. In the European approach, the distinction of humans from nonhumans is an evolutionary achievement. It is the result of humans evolving language, among other traits that once and for all set them apart from nonhuman animals. Humans distinguish themselves from one another by the use of different languages, but that does not threaten their status as humans. In the Indigenous Americas, by contrast, the difference between

humans and nonhumans, as well as the difference between human groups, can never be taken for granted and must be reaffirmed on a daily basis. It is an interactional achievement: my status as human is the result of my relations, of whom I talk to and in what way. I have to be very careful not to inadvertently respond to a being from a different ontological realm that threatens to abduct me into theirs. It is crucial for survival to maintain maximal communicative distance to predatory others.

At the same time, these others are of paramount importance for the reproduction of collectives. Whether enemy groups, jaguars, spirits, the dead, or white people, it is from them that knowledge and power are obtained. Hence, those in charge of administering cross-species relations have special communicative forms available to them that allow them to inhabit different perspectives simultaneously, to bridge different domains of the cosmos (Graham 1995; Oakdale 2018). Often, these forms themselves are incorporated from powerful outsiders, whether animals, neighboring Indigenous groups, or whites (Fausto, Franchetto, and Heckenberger 2008; Seeger 1986; Townsley 1993). Different discursive forms of different linguistic natures have thus vastly different origins and communicative functions.

What all this suggests is that linguistic diversity in Indigenous South America is not just important for the study of epistemology because different languages furnish different words for different philosophical concepts, while ultimately remaining in a state of perfect ontological equivalence and retaining the integrity of the “concept identity” (Stich and Mizumoto 2018: xii) of language. Rather, it is important because it rests on an ontological diversity of conceptions of language and forms of discourse. From Amerindian epistemological perspectives, different forms of discourse are important because they represent different vectors and pathways for knowledge practices.

As the contributions to the present volume show, what is central for practices of knowing in the Indigenous Americas is not the representation (and transmission) of objective, disembodied, and decontextualized propositions. Rather, it is most often a matter of practical, embodied skills, of the incorporation of substances, and of entangled webs of relations with others. The multiplicity of languages, genres, lects, and specialized forms of discourse are indispensable for these kinds of practices to be successful, not as different ways of representing different concepts, but as different material resources, pathways, and agentive participants in Indigenous practices of knowing.

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CHAPTER 10

The Uncertain Virtues of Incomplete Knowledge: Two Case Studies

H. Clark Barrett

Imagine being given a technology that you do not fully understand. You are taught enough to know how to achieve some of its intended effects, but the mechanisms by which it achieves those effects is opaque to you. You might not fully understand what power you are wielding, or be able to control what happens. What would your attitude be towards this knowledge, and towards the people who taught it to you? Would your lack of full understanding lead to skepticism about the technology, or awe? Would you view it as a source of danger, personal power, or both? And what would be the virtues and responsibilities of having such incomplete knowledge?

It is easy to imagine dramatic examples of such scenarios, and they are a ubiquitous theme in folk tales and science fiction. *The Sorcerer's Apprentice*, *The Lord of the Rings*, *Back to the Future*: these are cautionary tales where incomplete knowledge leads to grave danger and potential disaster. But we also face more mundane cases of incomplete knowledge every day. Most people who own cars only vaguely understand how they work, and yet we drive them. How cell phones transport our voices and data across space is unclear to most of us, and yet we use them unproblematically. And there are many other practices where not only the mechanism but also the intended effects of the actions themselves are so

far away as to be invisible to us, such as things we do now believing that they will prevent heart attacks or extend our lives by a few years. Science, too, is full of cases where scientists execute procedures—laboratory protocols, statistical tests—often, and perhaps usually, with only partial knowledge of exactly how those procedures achieve their intended effects (Gigerenzer 2018; Rozenblit and Keil 2002).

In the case of scientific practices, some theories appeal to social and historical processes to explain how such practices are grounded in collective knowledge, and can therefore be valid or justified even if the individual practitioner does not have complete knowledge of them (Shapin 1995). On some accounts, this might mean that someone knows how the technology works, it just doesn't have to be the practitioner themselves. On other accounts, the efficacy of the practice has simply been verified or confirmed over time by the community. Processes of social construction have been of particular interest in understanding how scientists reach consensus about scientific technologies and the knowledge they produce (Berger and Luckmann 1966; Latour and Woolgar 1986).

As mentioned, however, we don't need to go to science to find such phenomena. Ordinary life is full of cases of incomplete knowledge. So much so, in fact, that it might be argued that this is the norm for how we go about doing things in the world. The underlying mechanisms that make the deployment of our knowledge efficacious are typically either unknown or incompletely known to us, from activities as mundane as growing plants, to baking cakes, to using our household plumbing (Derex et al. 2019; Rozenblit and Keil 2002). Analogously, our deployment of cultural and social technologies such as language depends on a division of labor in which no individual who uses a word has full knowledge of why it means what it does (Putnam 1975). It seems, then, that humans in general are both comfortable with, and doing just fine in, states of incomplete knowledge. Indeed, perhaps it is precisely our ignorance of or inattention to these states of incomplete knowledge that makes everything just fine, so long as the knowledge is properly scaffolded by social and historical processes that are beyond us as individual agents.

What roles do our attitudes about our own knowledge, or lack thereof, play in all this? Clearly, there are many cases, perhaps most, in which we deploy knowledge with zero reflection on what it is that we don't know: when we use a word to refer to something, depress the gas pedal in our car, or take a pill to relieve a headache. But there are also cases in which we reflect on the unknown factors that make successful deployment of

our knowledge possible. What difference does, and should, awareness of the incompleteness of our knowledge make?

Awareness of incomplete knowledge can sometimes lead to comfort, and other times to worry. The social distribution of expertise typically relieves personal anxiety surrounding incomplete knowledge. Most of us are happy to defer to our mechanic or our plumber to save time and to reap the benefits of division of expertise. But if we worry that our incomplete knowledge is being used to deceive us, we might regret or try to remedy it (getting a second opinion, Googling it). And there are other cases where precisely in spite of our doubts we accept our incomplete knowledge, deferring to the experts out of respect, awe, or fear. As Michael Cepek (2016) and David Graeber (2015) point out, attitudes of skepticism and doubt about even the most culturally accepted knowledge are typical, everywhere, at least some of the time. There are few people, even among the most devout believers in religion or science, who never have doubts about or never reflect upon what they take to be true.

Here I would like to consider a set of knowledge practices¹ that I have learned about over many years in the Shuar communities where I work in Ecuador. These are traditional Shuar practices involved in hunting, gardening, health, and personal relationships. Central to my discussion will be the songs known as *anent*, along with practices surrounding them. *Anent* are sometimes described as “magical,” but are ordinarily understood simply by the effects that they are thought to have on the world, including animals, plants, the self, and other people.²

My own attempts to understand *anent*, as an outsider who neither knows nor practices them, started at the beginning of my research in Shuar, Achuar, and Shiwiar communities in 1997. I initially came to

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1. By “knowledge practices,” I mean not only practices that rely on knowledge (which most practices do) but also practices that are explicitly conceptualized as having to do with the maintenance and deployment of knowledge, and that thus require specialized expertise. Most scientific practices, such as the statistical practices that I will discuss below, are knowledge practices in this sense.
 2. Here I do not describe *anent* as magic. Shuar people sometimes describe them as magic when speaking in Spanish (if there is an equivalent term in Shuar I have not heard it). *Anent* could be understood as magic under some frameworks (Jones 2021). Here I see them simply as a form of technology about which most people have incomplete knowledge—as most people do for most technologies.

these communities because of a lifelong interest in biological knowledge that began in early childhood. I studied biology in college, which spurred a fascination with peoples' place in, and knowledge of, the natural world. In graduate school, I wanted to understand a tradition of expertise in biology outside of the European academic tradition I had so far been steeped in. This led me to visit Shuar communities and to ask them to help me understand their knowledge practices—initially, specifically about biology—and how they are embodied and deployed in contexts like hunting, gardening, raising children, and everyday life.

I first came to learn about hunting *anent* through a series of interviews I conducted in 2000 and 2001 in several communities with Shuar hunters, mostly men. My initial interviews were focused on knowledge and practices related to hunting and animal behavior. In the course of these interviews, the role of *anent*, as well as dreams, in hunting was frequently raised and discussed by my interlocutors, alongside discussion of hunters' knowledge of animal minds and behavior, which was a central theme of my questions.

I became intrigued by discourses surrounding *anent* and related practices. These included discussions of conditions for their efficacy, which depend not just on how the *anent* themselves are practiced, but also on how they are transmitted, maintained, and guarded. Crucially, while all Shuar people I interviewed knew about *anent*, only a small fraction reported being practitioners. A larger fraction of people in these communities have some partial knowledge of hunting *anent*, such as the ability to recognize one when sung, to describe them, recite lyrics, or to sing fragments. For some Shuar people, *anent* are a technology that is becoming lost, and whose power is waning—not only because of loss of knowledge, but also because of a gradual loss of the conditions for practicing *anent* in the ways that make them properly efficacious.

Discourses about *anent* are a fascinating context from which to understand how people think about incomplete knowledge, what conditions are necessary to turn knowledge into effective practice, and what incomplete knowledge means when the conditions of its maintenance and efficacy change. It is this question—how people grapple with incomplete knowledge—that I focus on here. I begin with discussions I have had about *anent*, and what I have learned about this practice and the conditions needed to learn, deploy, steward, and transmit it. I then turn to peoples' attitudes about this knowledge practice from, in many cases, a position of incomplete knowledge: that is, knowing *about* the practice without knowing the practice itself. Finally, I consider my own

position as an incomplete knower of even greater distance, and how this position has led me to reflect on my own knowledge practices in my work as an anthropologist and scientist, and the role of incomplete knowledge in them. I use as an example the case of statistics, a technology about which my personal knowledge is quite self-consciously incomplete, and yet which I practice as part of my work.

Anent, Shuar Hunting Practices, and Technologies of the Self

There is a large literature on *anent* and Shuar hunting practices more generally, which has greatly informed my understanding of these phenomena (Brown 1984, 2006; Chumpi Kayap 1985; Descola 1989, 1996, 2013; Harner 1984; Hendricks 1988; Kanus Chapaik and Juank Shuir 2013; Rubenstein 2012; Tsukanka Yankur 2013). Although there has been substantial cultural, linguistic, and historical variation in these practices across Chicham-speaking communities (Shuar, Achuar, Shiwiar, Awajún, Wampís), work that I have read in the classic ethnographic literature largely aligns with how *anent* and related practices have been described to me by Shuar people over two-and-a-half decades of fieldwork.

Anent are part of a suite of cultural and personal practices and beliefs oriented towards influencing outcomes in the world. Hunting is a domain where chance and skill cannot be separated, and hunting practices are oriented towards making the most of the chances one is given. I once saw a man berate his brother-in-law for missing a shot which, by any measure, was extremely difficult: we had encountered a group of howler monkeys, very high in the trees—I could barely see them—and the brother-in-law had sighted with his shotgun, squeezed the trigger, and missed. His relative grabbed the gun from him, saying, “when you shoot, you don’t miss”—and then proceeded to dispatch three monkeys in a row. This statement pointed to an attitude frequently made clear in hunters’ conversations with me: the world, and animals, present opportunities to you. When they do so, if you fail to capitalize on them, it is your fault. This, in turn, reflects a nearly deterministic view of hunting success, and the causal nature of the world more generally. Multiple hunters said to me that when conditions are right, you are “guaranteed” to succeed. Failure reflects a lack of discipline on one’s own part, an insufficient deployment of hunting skill, or a failure to adhere to the stringent conditions that guarantee hunting success.

A variety of conditions are necessary for hunting success to be guaranteed. Dietary discipline, for example, is an important part of all Shuar practices of knowledge power and includes fasting and avoiding certain foods, especially when first acquiring *anent* (Hendricks 1988; Rubenstein 2012).³ In the daily practice of hunting, dreams are crucial: having the right kind of dream guarantees success, and other kinds of dreams (or lack thereof) mean that it's not worth even trying (Brown 2006; Descola 1989; see also Langdon, this volume). As one hunter said to me, "When one has not dreamed luck, one cannot hunt." Shuar dream analysis is complex and involves a variety of symbolic relationships. I was told that a dream of carrying a huge, heavy sack augurs carrying home a tapir (because of the weight), and being attacked by a man with a knife means encounter with a peccary (ferocious, and the knife implies the peccary's tusks). A man who had one of these dreams would, upon awakening, immediately prepare to leave for the hunt, before dawn, eating nothing and saying nothing to his wife and family, who would understand his silent departure.

It is under these conditions that a hunter would sing *anent*, after leaving his house, on his way to the hunt. He would sing the song quietly, out loud but to himself. Being out of earshot of other people is crucial to the efficacy of the song, and careful, intentional repetition of the song to oneself, with great attention and reflection on the words, is necessary for it to achieve its effects. The genre of *anent* contains a variety of tropes and devices, but often words of *anent* are directed towards the animals one hopes to kill, naming them directly or through metaphorical symbolism, since humans and animals can be interchanged in some genres of Shuar speech (and body parts can be described as part of plants, artifacts, etc.). Sometimes the speech acts in the *anent* are requests or commands, but often they are statements of what will come to pass (e.g., monkeys arriving; a blowgun dart entering an animal in a specific place). One hunter told me of an *anent* directed towards trees, asking them to "kneel down," thus rendering the monkeys in their upper branches closer to the hunter. As in some cases of everyday Shuar speech, descriptions of current and future states of affairs can have the illocutionary force of requests or

3. I intentionally use the word "acquired" rather than "learned" here because this is how many Shuar people think about technologies of knowledge power: as something acquired, possessed, and embodied. Processes of acquisition of *anent* are discussed further below.

demands—consistent with the Shuar view of nonhuman beings as social agents capable of communication and reciprocity (Brown 1984).

Importantly, many of the speech acts in *anent* are either about or directed towards the self, something they share in common with shamanic songs (Rubenstein 2012). In first person, the hunter refers to himself, his skills, and the actions he is taking or will take (e.g., preparing a weapon for deployment; reaffirming that he does not miss). Sometimes the hunter refers to himself as an animal, such as an animal that the prey deems friendly or is attracted to (Brown 1984). Repetition and intense personal focus on the words one is saying are considered essential for these songs to have their desired effects.

Another set of conditions that are crucial for the efficacy of *anent* concern the ways that they are transmitted, learned, and curated by those who possess them—because they are seen as being “owned” or possessed by those practitioners who are able to legitimately wield them. Transmission must come from another *anent* owner, and under the right conditions. Typically, these songs are held and practiced by men, and are given to young male hunters by their fathers or other adult male relatives. Transfer of *anent* is seen as a transfer of both knowledge and power, which are one and the same (Hendricks 1988). Transfer of the essence of the song—embodied knowledge of it—is a gift of power, skill, ability, similar to how people might view the transfer of a weapon (which, of course, also requires transmission of the knowledge to use it properly). An *anent*, then, is seen very much as a kind of embodied technology, one that can be owned and transmitted, but also one that, like any other technology, must be kept in good working order, constantly maintained, and only deployed under the proper circumstances.

The conditions for the proper transmission of *anent* reflect broader Shuar views about the transmission of knowledge and power. Reception of power from other beings (e.g., people, shamans, and *arutam* spirits, who play a special role in bestowing power on people) requires severe asceticism, including fasting—avoiding meat in particular—and abstinence from sex. In some places, like the Awajún communities visited by Michael Brown in the 1970s, transmission of *anent* is accompanied by physical sharing of saliva and chewed tobacco (Brown 1984). In my interviews in Shuar communities in the late 1990s and early 2000s, this was not mentioned, though it could have been part of the practice. What everyone agreed upon was that one could not simply learn *anent* from a book or a recording and have it be of any use. It had to be transmitted from a true knower, a possessor, a practitioner—and the new user

had to reproduce exactly, with minute care and effortful attention to detail, the exact conditions of apprenticeship that the bestower of the *anent* had undergone, and that are necessary for the technology to retain its power.⁴ In this sense, the conditions surrounding the transfer, performance, and stewardship of *anent* resemble conditions of “continuous perfectibility” that Erin Debenport (2012) has described for Tiwa practices of knowledge power. Curiously, and perhaps differently from the Tiwa case, disclosure of certain details about *anent* was not viewed as problematic by anyone I interviewed. Maybe this was because, lacking proper knowledge, I would be unable to do anything useful with the information or compromise the power of *anent*—akin to describing what a nuclear weapon looks like, but not how to build one. This is not to say that Shuar people do not believe that inappropriate possession or use of knowledge can cause harm. There are many cases where it can, such as weak or incompetent shamans (*uwishin*) who fail to cure, or who attract the ire of more powerful *uwishin* (Rubenstein 2002). Whether *anent* are viewed as a technology that can cause harm if used improperly is not something I explicitly discussed with my interlocutors. However, as the howler monkey incident described above shows, acting without proper knowledge in cases where something important is at stake is severely frowned upon.

Not everyone I spoke to personally practiced *anent*. As for shamanic songs and practices, the actual apprenticeship involved in acquiring hunting *anent* requires secrecy and incredible personal discipline. Nevertheless, most people know about *anent*, what is involved in acquiring them, and how they are supposed to work. As noted above, even some nonpossessors can recite or sing portions of the songs, though in many places this kind of knowledge is limited to older people. Thus, *anent* are a specialized form of knowledge that is not itself a secret—which makes it an interesting case for thinking about how people think about incomplete knowledge.

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4. Here again we see the emphasis on knowledge as an embodied, performative phenomenon. This Shuar view of knowledge is held in common with many other Indigenous epistemologies, as reviewed in other chapters in this volume (see Barrett, introduction to volume). It also calls to mind Polanyi and Sen’s (2009) notion of the “tacit dimension” of knowledge, frequently missing in Western philosophical conceptions of knowledge as representational, or attitudes towards propositions.

Theorizing Efficacy

Anthropologists and Shuar people alike have been fascinated by the question of what makes practices such as *anent* efficacious, if indeed they are. While some Shuar people today express doubts about whether *anent* were ever efficacious, most people I have asked about this seem to hold the view that, yes, they probably *were*—when their grandparents truly knew them, and used them under the proper conditions—but that they might not work now, especially in cases where their conditions for efficacy are gone. These conditions include true knowledge of the *anent*, acquired and deployed the right way, as well as the lifeways and hunting conditions of ancestral times. Now, in most of the Shuar communities where I work (but not the ones where I did the interviews described above in the late 1990s and early 2000s), wild game are severely depleted, and the animals that are left do not have the same relationships with humans that they had just a few generations ago: they are much more wary and suspicious, altering the human-animal reciprocity assumed in the *anent*. People often live in houses with electricity, and lights and music are blasting before dawn—impossible conditions for the silent, mindful transition from dream state to hunt on which *anent* are predicated.

When pressed on the question of whether the *anent* of the ancestors would have been effective in the past, the Shuar friends with whom I had enough intimacy to feel comfortable asking this would often say something like, “I think so, because my grandparents told me so and I believe them, but how can I know for sure?”—a reasonable and truthful response to a question without a definitive answer. Others would say, more definitively, “Yes—but those were different times.” What was clear to me, and continues to be true today, is that most people believe in the efficacy of some kinds of ritual technology, of which hunting *anent* are just one exemplar.⁵

Anthropologists have not been nearly as cautious in offering their thoughts on the efficacy of practices such as *anent*, and similar practices

5. Here I am reminded of Michael Cepek’s discussion of Cofán people’s diversity of attitudes towards *coancoan*, subterranean beings who have been deployed in political discourses about oil extraction on Cofán land. As Cepek (2016) points out, people’s attitudes towards the reality and nature of the *coancoan* are reflexive, diverse, and explicitly framed by their positions of incomplete knowledge, often with more humor and skepticism than many outsiders expect.

in other places that are aimed at influencing worldly outcomes (for critical discussions, see Jones 2021; Tambiah 1990)). Anthropologists' answer to the question of whether such practices are efficacious has generally been "no," with some exceptions—for example, when the practices are aimed at influencing social outcomes (Graeber 2015; Sperber 1982). Since the origins of the discipline, anthropologists have also been eager to offer their theories for what is *actually* going on in ritual—including speculations about the folk theories that practitioners or observers have about how these rituals work.

Anthropologists from Frazer and Malinowski onwards have grappled with what Stanley Tambiah (1968) has called "the magical power of words." Clearly, words play a key role (though as we have seen, not the only one) in *anent*, which contain speech acts, including requests and statements that might be seen as having illocutionary force. In this, *anent* resemble other practices that anthropologists have debated in which speech acts seem designed to bring about certain kinds of events in the world. Some anthropologists have argued that such acts should be construed in terms of the causal theories of the people who practice them, while others argue that they should be seen "symbolically" (Brown 1984).⁶

Tambiah pointed out that for many rituals involving speech acts, no special theoretical contortions are necessarily required to understand them beyond theories that have been developed to understand ordinary cases of performative speech (Austin 1975; Tambiah 1968). Words uttered by the right kind of person under the right conditions can cause states of affairs to become reality: "I now pronounce you husband and wife," "You are under arrest," "For dinner tonight we'll have turkey." This groups many types of performative speech under the same umbrella, and the mechanisms whereby speech acts make a marriage real are different than those that create tonight's dinner menu. However, it is worth

6. There are many other theories of "ritual" in anthropology that I do not discuss here for reasons of space, and because this essay is primarily concerned with people's own attitudes towards their knowledge practices. However, there is an interesting related literature in cognitive science that asks how people's approaches towards learning "opaque" practices (i.e., of which they have only partial understanding) shapes their learning and deployment of these practices (Csibra and Gergely 2011; Herrmann et al. 2013; Kapitány et al. 2018; Kapitány and Nielsen 2015; Legare and Souza 2012)

entertaining the possibility that some of an *anent*'s power may come from the power of performative speech, including the intention to make a potential state of affairs into reality. This casts the self-directed or self-referential parts of *anent* in a new light: "Today, my arrow will strike a monkey." Who's to say it's not true?

Of course, certain felicity conditions are necessary for such statements to become true, but in principle that's no different than "tonight we'll have turkey." The grocery store could be out of turkey, or you could get a flat tire on the way. Relevant to the felicity conditions of *anent*, many Shuar people insist that in the recent past, animals were abundant, easily found, and there for the taking. If true, dreaming that one was going to kill a peccary might not be a bad reason to set one's sights on peccary that day, and to prepare oneself mentally using *anent*. On the other hand, the fact that peccaries are no longer as abundant as turkeys in a grocery store might be good reason to suspect that the efficacy conditions of *anent* might no longer hold, as some of my interlocutors seemed to imply.

This observation highlights that *anent* are considered just one part of a coordinated ensemble of practices that cannot be disaggregated. As Shuar people point out, an *anent* sung by itself, detached from other parts of the ritual ensemble and performed outside of the envelope of conditions necessary for success, is guaranteed to fail. You can't sing a hunting *anent* in a subway car in New York City and expect to catch a monkey. Not only must you have acquired the *anent* through the proper means, on any given day you must have had the right dream, feel right (e.g., you can't be sick), leave the house in the proper state of mind, and perform the song correctly—which requires intense focus and attention to the words of the song, and the determined intention to make the state of affairs described in the song a reality. A key insight into the potential efficacy of *anent* is that the song focuses on the self. Singing *anent* focuses attention on one's own mind, body, and bodily movements: lyrics often refer to one's own state of attention, ease (i.e., lack of worry or anxiety), and even one's own footsteps. Singing *anent* also focuses attention on one's connection to and intersubjectivity with prey, visualizing the animal and representing it as a fellow agent—potentially activating embodied cognitive capacities such as theory of mind which likely play a key role in hunting (Barrett 2005). Intense concentration on these things brings the outcome into being.

Few Shuar people in my interviews were willing to speculate explicitly about how *anent* work. Instead, they insisted on pointing to

the conditions that they were told were essential for the technology to work. In a sense, *anent* and its surrounding practices are a kind of “technology of the self” (Foucault 1988). They are a technology of concentration, discipline, and flow—and are conceived as such by those who practice them. Shuar people explicitly speak of *anent* and similar practices as one would speak of technology: as a tool or weapon that one possesses. They are also technologies of the self in the Foucauldian sense that they are embedded in a habitus of personal discipline, practice, and knowledge that give the technology its power. In this case, *anent* would seem to be a technology for focusing one’s will on the achievement of specific worldly outcomes, through intense discipline of body and mind.

The existence of practices related to concentration, discipline, and flow—and the notion that they might be efficacious, increasing the chance of achieving a goal—is not limited to the Shuar. Indeed, there exist many cultural practices, now of great interest to Western science, in which techniques of concentration and personal discipline are oriented towards achieving difficult outcomes, especially when one’s state of mind and body have a causal role in the outcome (Csikszentmihalyi 1990; Slingerland 2014). Hunting is clearly such a domain. Features that Shuar people insist upon as conditions of efficacy for *anent*—solitude, concentration, repetition, verbalizing desired outcomes—seem quite similar to features emphasized in this literature. There is experimental evidence that practices of these kinds can influence outcomes in difficult tasks. Experimental studies have shown that self-talk, visualizing desired outcomes, and other forms of mind–body orientation can improve performance in sports and other domains (Hall and Erffmeyer 1983; Jackson and Csikszentmihalyi 1999; Landin and Hebert 1999). Thus, it is quite plausible that practices such as *anent*, when performed properly under the conditions in which the practice has been honed for generations, might greatly improve hunting performance. Shuar hunting is a highly personal and immersive endurance activity that requires intense focus, concentration, and alertness, as well as calm in the moment of action in order to turn the opportunity the world has given you into a reality. When you shoot, you don’t miss.

With respect to *anent*, different people are in different states of incomplete knowledge. The owner of *anent*, presumably, has the most complete knowledge of all—but it still must be incomplete in some ways, because all knowledge is. As I did not interview practitioners of hunting *anent* directly about this issue for reasons of secrecy, I can only

speculate on how such a person would think about incomplete knowledge. However, even such an expert practitioner, like all experts, must be leaning on certain features of the technology that he himself does not understand—or understands in an embodied way that cannot be put into explicit words or theories.

For others more distant from the practice, their incomplete knowledge does not invalidate it. Indeed, the attitudes of those whom I interviewed with this kind of incomplete knowledge struck me as entirely reasonable. They understood the conditions said to be necessary for *anent* to be efficacious, and their judgments that under those conditions *anent* might well work, for reasons I've just outlined, seem justified. Personally, I have accompanied friends on many hunting trips, usually with all the grace and stealth of a bulldozer, and I stand in awe of those companions who have succeeded in catching prey despite my presence. It's extraordinarily hard. I have seen firsthand what kind of focus and concentration is necessary, and to me the notion of *anent* as a highly refined and efficacious technology of the self makes sense. From my position of incomplete knowledge, I have seen enough to recognize that the practice could work, when done under the right conditions by someone who knew what they were doing.

From *Anent* to Scientific Rituals

Many younger Shuar people I have talked to express ambivalence about traditional knowledge and practices such as *anent*. Such ambivalence is normal and understandable in times of rapid change and uncertainty, which not just Shuar communities but all communities around the world are experiencing, and perhaps always have (Bessire 2014; Cepek 2016; Graeber 2015).

There are some cases in which communities, including Indigenous ones, self-consciously choose to leave behind certain traditions, often for just the kinds of reasons described above: that the conditions of their efficacy are now gone (Bessire 2014). There are other cases in which communities retain traditions precisely *because* of the change in conditions that is occurring, and as a way to guard against them—sometimes with full knowledge that the odds of success are uncertain (Debenport 2012, 2015; Kroskrity 2009; Lear 2006). In the case of *anent*, this technology is associated with a practice, hunting, that is rapidly disappearing, so for many people the extreme costs required to maintain it may simply not

be worthwhile. And yet this is not because of a lack of respect for the practice or disbelief in it.

As I spent more and more time in Shuar communities, I could not avoid thinking about expert knowledge practices in my own communities: the community of social scientists with whom I interact; my friends in the United States outside academia; and the larger community of Americans whose views are visible in the news, social media, and cultural trends. Across these communities, there exist a variety of views and attitudes towards science and scientific knowledge. Generally, science is respected in a manner similar to Shuar respect for *anent*: most people recognize scientific knowledge *as* knowledge, and efficacious knowledge, even in cases where it is not knowledge that they themselves possess. Notoriously, however, this is not always the case, especially when the trust and respect on which scientific practices depend—as do all forms of expertise—are eroded. In the United States, we have seen this recently in the phenomena of antivaxxing and climate change denial, phenomena that show that even expert testimony coupled with publicly available evidence is not sufficient to maintain belief in incomplete knowledge in the absence of trust.

In my own work and practice, some kinds of knowledge can be seen as technologies that can be used to achieve concrete goals. Like *anent*, there are values and attitudes surrounding these practices, including beliefs about the conditions required for their efficacy. In fact, like *anent*, there are some practices that scientists believe are essentially “guaranteed” to work when deployed under the proper conditions. Randomized controlled trials are one example. Another example, which I use in my own work, is statistics: particularly, the use of statistical models to draw conclusions from data, such as whether a particular hypothesis is supported or not.

Most people familiar with statistics, and especially expert practitioners, are aware that statistics can produce error when used the wrong way. Growing up, I had an old paperback copy of Darrell Huff’s 1954 book *How to Lie with Statistics*—you don’t even need to read it to get the basic gist (see also Bergstrom and West 2021; Levitin 2016). But while skepticism towards statistics exists, the opposite belief exists too: that when used the *right* way, statistical procedures are essentially guaranteed to give you the right answer. This belief is sometimes held by people, including scientists, who if pressed would be unable to explain exactly what the efficacy conditions for those statistical procedures are, nor the precise way their results, such as the notorious *p*-values of null

hypothesis statistical testing (NHST), are true (Meehl 1967; Rozeboom 1960; Wasserstein and Lazar 2016). Currently, some parts of the social sciences are undergoing a reckoning, sometimes called the “false positive” or “replication” crisis (Gigerenzer 2018; Ioannidis 2005; Maxwell, Lau, and Howard 2015; Simmons, Nelson, and Simonsohn 2011). This reckoning was spurred by the discovery of widespread “false positives,” or false knowledge, resulting in part from misapplication of statistics by people who incompletely understand them (or, in some cases, intentionally misapply them).

My own knowledge of and attitudes towards statistical practices were deeply shaped by my postdoctoral studies in cognitive psychology with Gerd Gigerenzer and Peter Todd, which began shortly after I began working in Shuar communities. Gigerenzer is well known for his critique of what he calls “statistical rituals” (Gigerenzer 2018; Gigerenzer, Krauss, and Vitouch 2004). In this critique, he argues that many scientists deploy statistical technology without fully understanding how or why that technology works, including its conditions for efficacy and the proper way to interpret what it produces. He and others have critiqued what he calls the “null ritual” in NHST, whereby scientists use procedures, such as t -tests, that produce p -values. Technically, a p -value is the probability of observing a result as least as extreme as the one observed, under the assumptions of the “null hypothesis” (an alternative to one’s own hypothesis).⁷ In practice, when a p -value is less than .05, many scientists conclude that the finding is “significant” in favor of their own hypothesis.

There are technical reasons why this conclusion—“ $p < .05$, therefore my hypothesis is likely to be correct”—is false, having to do with the fact that p -values apply to the null hypothesis and not one’s own. There is, in fact, a correct interpretation of p -values and therefore there are valid applications of NHST (Frick 1996). What matters here is that the practice of NHST can lead to error when used inappropriately, and many argue that it typically is. NHST is often used in good faith, but by practitioners who misunderstand it, to provide statistical evidence for their own hypotheses. Gigerenzer uses the term “ritual,” in this context, to suggest that people are using a form of technology that they believe works, but without understanding how (a description that does not necessarily apply, of course, to all ritual practice). In fact, NHST is just one example

7. For additional technical details see Frick (1996); Gigerenzer, Krauss, and Vitouch (2004); Rozeboom (1960); Wasserstein and Lazar (2016).

of a broader category of statistical procedures that can produce error when misapplied (essentially, all of them). In some sense, the risk of error scales with the complexity of the statistical procedure. As complexity increases, so does the opacity of the link between efficacy conditions and the reliability of conclusions drawn—and, often, the magnitude of the practitioner’s incomplete knowledge. A growing literature explores the consequences of incomplete knowledge for statistical malpractice (Gelman, Hill, and Vehtari 2020; McElreath 2018; Simmons, Nelson, and Simonsohn 2011).

Varieties of Incomplete Knowledge

Some might question the relevance of comparing statistical practices with *anent*, grounded as they are in very different knowledge traditions. But the more I have learned about both, the more I have come to appreciate the aptness of looking at each through the lens of the other, and the insights this comparison generates. These insights concern not just the “negative” side of incomplete knowledge—the mistakes and misunderstandings that it might lead to—but also its positive side: that is, better understanding of the relationship between incomplete knowledge, efficacy conditions (including trust), and the capacity to produce the outcomes we genuinely want.

Crucially, statistics and *anent* both rely on belief, trust, respect, and expertise. There is belief that the technology is efficacious and trust in the ancestors who developed the technology. These, in turn, are grounded in respect for those ancestors and their rigor. Most social scientists, including me, are not ourselves statisticians, but view mathematical expertise with a sort of awe. We trust that those who developed the technologies knew what they were doing, an attitude similar to what Shuar people express about the ancestors who have handed down *anent* to the present. There is explicit recognition that we are using tools that we do not fully understand, but we trust that *someone* does (or did), and that they established the efficacy conditions correctly.

Our statistical knowledge and practice exist, then, in a state of continuous perfectibility (Debenport 2012). We know that our knowledge is imperfect and incomplete but we believe that perfection is theoretically possible, and we are forever struggling to attain it. This is inherently a social process: we trust that practices developed by our statistical ancestors are correct, we know people who understand them better than we

do, and we look to emulate their attitudes and practices, often without understanding exactly why (which itself can lead to error [Gergely and Csibra 2006]). This trust even extends in a second-order way to our attitudes about the replication crisis: it was Gigerenzer who first made me aware of the pitfalls of NHST, a critique that I did not at first fully understand and perhaps still don't, though I believed from the outset that he was right.

The lesson that Gigerenzer and other statistical experts tell us is that in order for our statistical practices to be efficacious, we need not know everything about exactly how they work, but at minimum we must know *what* the conditions of efficacy are, and adhere rigorously to them—similarly to *anent*. Beyond that minimal knowledge, statisticians urge that to properly deploy the tools of statistics to achieve the ends we want and no others (e.g., unintended outcomes such as falsely believing our hypothesis is confirmed), we must also understand *why* and *how* those conditions lead to efficacy (i.e., mathematically). Here, because I have not been privy to the knowledge of direct practitioners of *anent*, I cannot say whether such experts would insist on that second level of understanding. I can say, however, that many practitioners of statistical techniques, including myself in some cases, deploy the technology only with the minimal level of understanding of what efficacy conditions are (e.g., that *t*-tests require normally distributed data), but without always understanding exactly why they hold.

When thinking about efficacy conditions for both *anent* and statistics, there is an interesting analogy to the concepts of “match” and “mismatch” from evolutionary and cultural theory (Barrett 2015, 2018; Li, van Vugt, and Colarelli 2018; Lloyd et al. 2024; Stephens and Townsend 2015). In evolutionary theory, the concepts of match and mismatch are grounded in the notion that functional traits evolve under sets of background conditions that render them efficacious or functional. These can include biological traits like our digestive and immune systems, but also cultural traits like *anent* and statistics. In environments that are stable over many generations, these traits and practices can be well matched to their background conditions, thus maintaining their functional efficacy (which can also be thought of as “mind–world fit” [Barrett 2015]). The same idea is embodied in the framework known as “ecological rationality,” in which the “rationality” or efficacy of decisions and other practices depends on their fit to the world or environment in which they are deployed (Todd and Gigerenzer 2007). Crucially, environments can include social environments (e.g., conditions of learning, practice, and

social trust) as well as nonhuman ones (e.g., forests, prey), and in the case of statistics, mathematical ones.⁸ When conditions of efficacy no longer hold, mismatch can occur, rendering the traits or practices ineffective or even harmful. This is quite a different way of thinking about practices and knowledge than asking whether or not they are objectively or permanently “true” or “correct.” It is the conditions under which they are deployed and on which they rely that make them so.⁹

Of course, it’s important to recognize that conditions of trust and conditions of environmental match are not the same. There are many varieties of environmental match that do not depend on trust, such as the match between one’s immune system and the environment of pathogens that is required to fend them off. However, when social technologies enter the picture, then trust can be a component of efficacy. In the case of vaccines, for example, trust in the technology—even by those with only very partial knowledge of how they work—is the crucial factor in deciding whether they will slow the spread of a disease. For *anent* and statistics alike, trust in the ancestors who developed and transmitted them is necessary for them to work, in addition to whatever nonsocial match they might have with the environments (natural, mathematical) in which they are deployed.

In addition to their similarities, there are many differences between *anent* and statistical practices, some obvious and some less so. One is that practicing or performing *anent* doesn’t do anything without the proper knowledge. As discussed above, one might recite the words of *anent* or even sing them and nothing would happen if this was not done properly (though one could, in principle, do harm, e.g., by scaring animals away). Statistics, on the other hand, are much more dangerous: they *do* produce results, essentially always. Most of us use software packages such as *R* (R Core Team 2021). If the data are formatted in the right way and

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8. The efficacy of most inferential statistical procedures depends on assumptions about how underlying data are distributed, and will lead to false results if those assumptions don’t hold true. For example, *t*-tests assume the underlying data follow a normal, or Gaussian distribution. If not, a condition of mismatch applies, and the output of the test—including the *p*-value it produces—will be incorrect.
 9. Efficacy conditions as described here are essentially the same as what I have called “felicity conditions of inductive bets”: the conditions necessary for a plan of action based on past states of the world, but undertaken in the present, to achieve its goal (Barrett 2015).

you type in the right syntax to run a statistical model, the software will build the model and give you an answer. There is a sense in which this answer is never “wrong”: it’s the answer you get when you run the model you specified on the data you fed in. What can be wrong is the practitioner, and what we conclude from the model. Given the central role of statistics in domains of real-world impact such as economics and social policy, their power is substantial. What we know about global warming and what we know about vaccine efficacy, for example, are dependent on these technologies. The stakes of incomplete knowledge are therefore high. Not only can this lead to substantial harm through the accidental misuse of statistics, it can also motivate their intentional misuse and the exploitation of others’ incomplete knowledge for personal or social gain (Smaldino and McElreath 2016).

There are many other interesting connections between *anent* and statistics that could be explored. These include questions of how knowledge is distributed—the division of expertise, secrecy, and ownership—and how these might impact the stability, efficacy, and power of knowledge practices. One might be tempted to draw an analogy between the legal notion of a “trade secret” and practices such as *anent* or statistics—but there are differences (Heller and Salzman 2021). Certainly, some statistical practices *are* trade secrets, such as the statistical algorithms underlying proprietary search engines such as Google. Notoriously, one can (and must) use Google’s search algorithms in a state of incomplete knowledge, and one both benefits from, and is prey to, these trade secrets.¹⁰ For *anent*, the situation is slightly different. Secrecy is an important condition of transmission of *anent* as well as their deployment, as described above. But unlike the case of Google, the owner and the consumer of this proprietary knowledge are, for *anent*, one and the same. In the case of statistics, none of the procedures used in social science are trade secrets, because of the open-source ethos of the community; anyone can get full knowledge of the technology if they wish. However—and this is an interesting case study for those who would defend the economic value of trade secrets—expertise is still distributed, and those with statistical knowledge have marketable skills because of the recognized power

10. The use of proprietary algorithms in many domains, from hiring decisions to predictive policing, is highly problematic because of their opacity, which can lead to real harms and the erosion of trust in their ability to produce what their owners claim, including social goods such as fairness and justice (Tufekci 2015)

those skills embody. Across all of these practices, incomplete knowledge is scaffolded by values and attitudes. Comparing practices can help illuminate the ways that efficacy of knowledge depends on those values, hidden or not.

Conclusion

In this essay, I have attempted to connect my own incomplete knowledge from two very different contexts, asking what insights each holds for the other. As such, this is a form of experimental ethnography, a highly personalized and conjectural attempt to squeeze understanding from my own situated point of view. Of the two phenomena I have examined, *anent* and statistics, my knowledge of statistics is far greater. I am a practitioner of statistics, but not of *anent*. Also, compared to my relatively small sample of Shuar opinions about *anent*, I have a much larger sample of scientists' attitudes towards statistics. I have directly observed my own and others' practices of statistical inference, the conclusions we draw, and the certainty with which we hold those conclusions.

A lesson I draw from my limited, situated position in each of these knowledge worlds is that we should attend to our incomplete knowledge, and we should be reflexive and deliberate in the values and attitudes we hold towards it. There are many reasons for this. One has to do with the sometimes implicit or hidden nature of values. Some scientists might dismiss the notion that statistical procedures bear any resemblance to *anent*. Many scientists adhere to what Heather Douglas (2009) calls the "value-free ideal," pretending that science is about pure knowledge and nothing else. This leads them to ignore values that they themselves hold, implicitly, and must exercise on a daily basis in order to do their work. This includes forms of "blind" trust—faith—that many scientists would call unscientific, or at least extrascientific. As Douglas points out, there are always limits to what we know, and when we reach those limits it cannot, by definition, be knowledge that we rely on to decide what to believe. It cannot be knowledge all the way down. Other values, like trust, aesthetics, ethics, tradition, skepticism, must come into play. Since all knowledge is incomplete, we must lean on values outside of what we know in order to make that knowledge effective.

This, in turn, suggests that it is epistemologically valuable to examine our knowledge-related values and practices to make sure that they are properly matched to our incomplete knowledge, and not mismatched.

The attitudes of trust and respect explored here are good examples. If we trust that a technology works, then we should ask ourselves where that trust comes from, and what warrants it. We should also listen to the experts who insist on transmission of knowledge of efficacy conditions as part of that technology. To trust that a *t*-test will tell you if your results are “real” without understanding the efficacy conditions of that conclusion is, like the sorcerer’s apprentice, to wield a tool of great power without understanding what it does, or how.

Just as the practice of *anent* has made me see science in a new light, my immersive experience of the practice of statistics has made me think of *anent* in a new light. Universalism is out of fashion, but I would argue that there are deep similarities in how we see knowledge technologies that are handed down to us by trusted ancestors and teachers. Trust, like technologies themselves, is a double-edged sword. When properly placed, it is what gives technologies their power, but also their power to do harm. Trust in science, like trust in other traditions, is good, but trust grounded in understanding is better.

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CHAPTER 11

Knowledge in the Upper Amazon: Indigenous Voices from Urarina, Shuar, and Shiwiar Communities

Medardo Arahuate Manizari, Jorge Caringkia, Jervacio Gualinga Chuji, Mariano Tsetsekip Santi, Emanuele Fabiano, Joshua Homan, and Alejandro Erut

In recent years, there has been an increased focus on Indigenous knowledge and its importance not only for the local Indigenous communities from which it emanates, but also for humanity more broadly. Although there are many different interpretations and visions, not to mention the numerous theoretical and methodological approaches, which have emerged alongside Indigenous systems of knowledge, there is still a crucial need to incorporate Indigenous knowledge more widely, particularly in debates regarding climate change, extractivism, and the production of scientific knowledge. Moreover, the recognition of the plurality of Indigenous knowledge, which has long been out of sight to many, offers a deeper understanding of the diversity of thought found in contemporary Indigenous societies, and allows for the creation of unprecedented theoretical tools that would allow us to evaluate problems, determine challenges, and design alternatives for action drawn from these systems of knowledge.

As such, rather than focus on a specific aspect of what, from our own perspective, would characterize Indigenous ways of thinking, we have instead opted to explore the very notion of knowledge itself and, therefore, its typologies and dimensions. To accomplish this, we utilize approaches that have emerged from our Indigenous collaborators, who are recognized within their own communities as being wise individuals who possess valuable knowledge.¹ As such, drawing on questions that guided academic research within the framework of the Geography of Philosophy Project,² we conducted a series of interviews with Urarina, Shuar, and Shiwiari collaborators: Jorge Caringkia (JC), Medardo Arahuate Manizari (MA), Mariano Tsetsekip Santi (MT), and Jervacio Gualinga Chuji (JG). Thanks to the original recordings of these interviews, we were able to produce accurate transcriptions and translations. From these transcriptions, we then set out the task of selecting and analyzing a series of topics that had emerged as being most relevant, or that, due to their immediacy or argumentative vigor, could animate a dialogue resulting from a plurality of voices and perspectives that emerged from the interviews. Therefore, the work of selecting and editing these transcripts was undertaken in a way that was as respectful as possible to the original collected materials with the objective of retaining the richness and complexity found in the words of our Indigenous collaborators.

The themes that emerged from the interview fragments gathered here invite us to redefine both the use and meaning usually ascribed to the notion of Indigenous knowledge. The most common definition, often used in relation to contemporary Amazonian Indigenous peoples, seems to indicate a generic set of ideas, values, and abilities that individuals acquire, cumulatively, throughout their lives. This definition, being reductive and partial, erroneously implies the existence of an undifferentiated category: a general, unified set of beliefs and practices that are then associated with particular Indigenous groups. As the individuals interviewed here teach us, however, such a reading of Indigenous knowledge

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1. We must note here that this is a one-sided account of knowledge within these Indigenous societies, focusing primarily on men's perspectives. We hope to rectify this in the future with a follow-up piece focused on the same questions with Indigenous women leaders from the same communities.
 2. See <http://www.geographyofphilosophy.com> for more information on the Geography of Philosophy Project.

hides the plurality and diversity each Indigenous group recognizes in its shared heritage.

The multiplicity of perspectives detailed here—along with the varied life experiences that have shaped them, such as differential access to education, integration into the market economy, mobility, and conversion to Christianity—demonstrate that while we find commonalities, there are also crucial differences that challenge generalizations of Indigenous experience in contemporary Amazonia, even within the same linguistic family, as is the case with our Chicham-speaking Shuar and Shiwiar collaborators. As such, this material forces us to rethink, reassess, and recontextualize the dominant theoretical approaches to Indigenous knowledge, in Amazonia and elsewhere, moving away from generalizations and instead enriching our understanding through the diverse perspectives embodied in the voices of our collaborators.

What Is Knowledge?

For our Shuar collaborator Jorge Caringkia, knowledge is directly connected to the construction of the individual, or the self, which is conceived as consciousness. In addition, as he eloquently explains, knowledge is constituted as a prerequisite for action. If the person or individual lacks knowledge related to a particular practice, they are unable to carry it out. Therefore, one must acquire the necessary knowledge prior to undertaking certain tasks:

JC: It would be, for me, it would be the awareness of the very existence of each person, that would be thought, as you say, knowledge. ... Yes. It is the person's thought, and what each person has, each personhood. And also, because the one that knows [how] does; if one doesn't know [how], the person can't do [something]. Is it not true? ... So, I say yes. I would say, for me, it is the awareness of the person's own existence. That each one thinks, knows, and does their things.

As Mariano Tsetsekip points out, for the Shiwiar, knowledge can be thought of as anything an individual can learn throughout their lives. Knowledge here is understood as being processual, continuous, variable, and connected to the ways in which humans live their lives from the moment they are born until their death. This knowledge, which

Mariano refers to as being multiple in nature, is concerned with distinct domains and is acquired through a variety of different experiences. Whether through interacting with the natural world or through relations with other individuals, such as in social interactions, conversations, and consulting with community elders, knowledge is always defined as being processual. Likewise, interacting with the natural world through methods such as the ingestion of sacred plants like *natém* (ayahuasca) highlights an ontology that includes sources of knowledge that are often not considered as such in Western thought, as is also the case of knowledge acquired through dreams (see, e.g., Descola 1996; Erut, Smith, and Barrett 2023; Mader 1999).

MT: Knowledge for me is from nature. From the time a human is born, we're already seeing and creating knowledge, multiple knowledge(s). They may be activities; they may be languages. In other words, all the ways of how to live, from childhood. Starting when a human is born, that is when their knowledge begins: to be able to crawl, to be able to walk. All of this until they are teenagers, adults. So all that knowledge comes from nature so that one can know in life the different ways of living. Right? There is a lot, a lot, to continue learning, so that through knowledge, one learns from another way, from another activity, from a different culture. Right? That is the way to understand with knowledge.

... Now, in order to have a lot of knowledge, that would be through dialogue, through consultation, that is, to ask. If I don't know about the topic that I am planning, I should ask an elder. I can do that and the elder informs me on such topics. If you don't have everything for that activity or you haven't planned [anything]—if you don't have the power, you can't make war. In addition, you can teach me because that is knowledge. Knowledge can tell me what it is if you have an experience when fasting or drinking *natém*, if you have a vision through *natém*, if you have taken it. If I don't have knowledge, I can't do anything.

What Is Urarina/Shuar/Shiwiari Knowledge?

As noted in the introduction, generally, Indigenous knowledge can be understood as knowledge that is produced in sociohistorical contexts

and is typically generated through a set of rules or procedures passed down from one generation to the next. Although these sets of knowledge are variable, it is still possible to identify some characteristics that they have in common. According to Jorge Caringkia, Shuar knowledge, above all how it is obtained or transmitted, is directly related to practical knowledge, especially that which is of an ethnic nature with an ethical imprint:

JC: We, as Shuar, have knowledge that is very different from that of settler colonizers and other Indigenous nationalities. Therefore, it's not the same thing. It's not the same, because if, for example, I know how to make a canoe, then I have that knowledge about how it should be done. If one does not have that knowledge, they're not going to know how to make it. Without knowledge, we can't make it. So, it's what the Shuar have as their own knowledge. What they do with their knowledge.

Likewise, for the Urarina, the way in which knowledge of local cultural traits is transmitted is also characterized by the relevance that experience and practice have in the very definition of this notion, encompassing eminently collective processes of learning, circulation, and constant re-creation during the development of the individual and between generations, as Medardo Arahuate indicates here:

MA: At first, when you're a child, you don't know anything. Then as you grow, little by little you learn things, like, for example, fishing: knowing the bait and how to place it on the hook to catch fish according to the type you use. Sometimes our parents teach us how to set the hook when a fish takes the bait. After one learns how to make an oar, first it is necessary to know all the processes to make it, and our father teaches us the process by doing it, so that later we can follow all the steps and say, "This is how my father did it and I have to do it the same way he did." Then you learn how to make a *chacra*.³ I taught one of my sons how to make a *chacra*, I explained all the

3. The term *chacra* (in Peru) or *chakra* (in Ecuador) refers to a polyculture garden plot cultivated for subsistence and maintained through the practice of swidden horticulture.

processes to him and then he went to make it. He began to dig holes to plant plantain cuttings, but he did it wrong; he started at one corner and ended at the opposite corner. The same thing happened with the remaining corners; he made it in the shape of an “X.” Afterwards I went to see him, and I said, “How did you do it so that it came out in this shape?” and he told me, “I did it like that because it was easier.” Then I told him that it is not done like that and explained to him the correct way of doing it. However, he told me that it’s difficult—even though it wasn’t—but he finally understood and now he does it really well. In hunting, you need to know all the processes, so you do not scare the animals. A lot of people who don’t know how to hunt, rather than silently chasing the prey, make a lot of noise and the animals run away; they scare the animals. This usually happens with people who don’t know the processes of hunting. To cure illnesses, it is also necessary to know all the processes. To make a canoe, it is also necessary to know all the processes. When I was a young man, I dared to make a canoe for the first time. First, I learned from the elders. I watched closely what they did during the work of creating it. Later, I followed all the steps and finally was able to do it well. Thus, one can come to know many different things.

The intellectual, practical, and moral habits that structure the notion of knowledge are established around content that is intended to be transmitted or stimulated in its elaboration. Due to its collective nature, as Mariano Tsetsekip clearly points out, knowledge is built over time and generations, and therefore develops through its transmission and adaptation upon the basis of preexisting knowledge, which in turn is collectively produced, re-created, developed, and updated:

MT: It is known since childhood; you are already being introduced to or informed of the steps of how one should grow up. Our grandparents said, for example, “Don’t steal. Don’t be bad-mannered.” Having, that is, a traditional education based on knowledge. This education, the activities that can be done in the future when we are older or adults, all of it is taught by our fathers, that is, our parents, our grandparents. It is purely Shiwiar knowledge that the Shiwiar people know. Other parts,

other Indigenous nationalities, don't know it, but the Shiwiar know the ways of their culture, of their traditions. Right?

Then there are different songs as well. They sing to go hunting, to go with their dogs so that animals don't eat them, so that they don't get lost. They also go knowing how [to hunt]. ... They are taught from childhood. And with women as well. With girls, their mothers or grandmothers already begin to make them know and learn about planting [from childhood]. How we plant, how one plants manioc, how ... in other words, the technique. Thus, the technique of teaching is making one know from childhood until they are older, to adulthood. Therefore, ancestral knowledge, we would say, continues to be used up to today. The Shiwiar have their own knowledge that is very different from that of the other Indigenous nationalities.

However, the mere transmission of Shiwiar knowledge does not ensure its preservation and, as such, it cannot be reduced to the mechanical transfer of a particular repertoire of practices but instead demands updating through shared action:

MT: We have to acculturate knowledge from other cultures as well, but it is very different. What constitutes purely Shiwiar knowledge, however, are what I call techniques: hunting techniques, work techniques, survival techniques above all, that is a story as well. So, that is the knowledge that our parents, our grandparents, even our great-grandparents, go sowing, placing the knowledge that we maintain up to today. That would be the Shiwiar nation's knowledge.

The explanations offered by Jorge Caringkia, Medardo Arahuate, and Mariano Tsetsekip highlight a point that all the collected interview fragments reflect. In the three cases, knowledge is described around traditional practices from which daily life is nourished: fishing, hunting, farming, building canoes, and so on. Likewise, the descriptions of ethnic knowledge—which refer to a “we”—are permeated by references to social and generational transmission, as with our Urarina and Shiwiar collaborators' commentaries. Jorge Caringkia also highlights the importance of ethnic identity by focusing on the frontier that divides Shuar knowledge from the knowledge of others, especially that of *colonos* (non-Indigenous settlers).

What Types of Traditional Knowledge Should Not Be Lost?

As our collaborators have expressed, we can state that the preservation of systems of Indigenous knowledge does not presuppose their crystallization or reification, although this knowledge is stored in memory. In conjunction with experience that cannot be reversed, knowledge rather requires the use of mechanisms of intergenerational transmission, understood as a form—perhaps the most important form—of preservation that is capable of being integrated with outside knowledge that is primarily associated with the non-Indigenous world. Regarding this, Jorge Caringkia tells us the following:

JC: What can't be forgotten is our language. Another thing that we cannot forget, what we have forgotten is drinking *guayusa*⁴ and the ways of living. We can't forget that, because from here on out ... even though I am well prepared, even though I have a Master's degree, I'm not going to change anything: I can't forget the things that I have learned. The things that my father had taught me, I can't forget.

Mariano Tsetsekip and Jervacio Gualinga identify shamanic practices, and their entire repertoire of therapeutic techniques and rituals (e.g., curing, cleansing, prenatal care, childbirth, postpartum care, hunting activities, etc.), as being among the most important traditional knowledge. Its links to the identity of the Shiwiar peoples marks the necessity of its recovery, transmission, and preservation:

MT: For my part, I don't want to lose the knowledge that is applied, for example, for cleansing the liver, for illnesses, for children—medicine for children, adults. This [knowledge] has already been applied and has had power for both women and men. Not even being a shaman, practically as people already have their skills, their secrets, their magic, but now I see that it's gradually weakening. I don't want that to be lost. Likewise, when we were talking about midwives, for example, my friend Jervacio's mother is going to die, and who is going to take her place if we have not practiced? I don't want that knowledge related to midwifery to be lost. I also don't want to lose

4. See footnote 6 below.

knowledge related to hunting techniques, because, well, we won't be able to recover it. I think it is going to be filed away and I do not want it to be lost. I also don't want to lose our culture, language, traditions, customs, and clothing—I want to continue maintaining it as Shiwiari. We can't lose our hunting tools so we don't buy shotguns, dynamite, all of that. It's better now that we are taking care of the environment and biodiversity. Our ancestors used to manage with a blowgun, and they didn't kill off all of the animals. On the other hand, today we're hunting with shotguns and damaging the environment, so I also don't want to lose that. All of our ancestors' knowledge is maintained and, rather, we want to recover or rescue lost knowledge and continue maintaining it for future generations.

JG: Yes, this would also be, for example, without custom you'll be lost. As our culture says, in other words, without *kara* [dreams], without what is called *wamankamau* [visions], you're going to be lost. I would say that we're going to die off because we don't know that. Because if we don't know that, we're going to disappear because we're forgetting, we are going to die in vain. And my granddaughters and grandsons, later on, are going to continue to die in vain, in other words.

MT: Yes because there isn't any power now.

JG: Yes, without power like that we're going to go away, that's why it's happening. After I die, or I don't know, but that's why I say that it's better not to lose that [knowledge] and not to forget it either. We have to keep practicing because we're going to live with that [knowledge].

How Does One Obtain Knowledge?

Although educational programs and schooling promoted by various governments for Indigenous communities are widespread in many Amazonian regions, they are also often of low quality. This is primarily due to a lack of resources and the scarcity of teachers who are trained to adapt to the challenges of multicultural education. With such a situation, the intergenerational transmission of knowledge continues to play a fundamental role. As Jorge Caringkia indicates in relation to the Shuar:

JC: Knowledge is obtained from our parents who teach us. And yes, we have been getting that knowledge. That's how it would be because that's how it is. You learn, you know. We obtain knowledge from our parents, and when we are growing up, we continue to get knowledge.

Similarly, according to our Urarina collaborator, Medardo Arahuate, the acquisition of knowledge is possible thanks to a cumulative process in which technical and theoretical abilities are transmitted, generally through the teachings of elders:

MA: When a person doesn't have knowledge of flute music, one who knows has to teach that person who doesn't know, passing the knowledge to that person. In the same way, to make a canoe, share the knowledge about canoe construction with the person who doesn't know this activity. The same goes for making an oar. I, for example, saw my father make oars, then I would imitate him, and later I asked him: "Is this how you do it, dad?" And he would tell me: "Just a bit more to do it perfectly." That's how you can become knowledgeable, just like those who have a lot of knowledge. The same is true for making a blowgun: the one who is knowledgeable about making them transmits the knowledge, and then the blowgun comes out perfectly and is good for hunting. It's because the person had already acquired the transmitted knowledge.

In this sense, the elders of the community become the holders and referents of knowledge, who are often responsible for guiding children and young people in a process of formation that promotes practical, grounded ways of learning by doing. However, vertical transmission through older adults or parents does not represent the only source of knowledge for the youngest community members. Indeed, there are other sources and modes of transmission, such as practices related to bodily discipline through prescriptions and proscriptions, commonly known as *la dieta* (the diet), or even through dreams. Mariano Tsetsekip clearly delineates how these sources of knowledge have a central function for the Shiwiari:

MT: For there to be knowledge, there is a requisite, an obligation, that must be met. And that is, you have to fast ... without eating. To be in the forest for two or three days. Right? Then,

through dreams, someone, like a powerful person—a warrior who died or someone else who has transformed into an animal—will make a sound like a jaguar. When you hear that, hearing it, you go to sleep where you have made a lean-to shelter. Then when you are in it, through a dream, you are told that [the spirit] was close to you to give you power. Therefore, that gives you knowledge. Moreover, during the fast, other new knowledge is born—other types of new knowledge. So, what is this new knowledge? It's a song. In the dream, dead people teach us songs. Sing like this for the war song, the love song, the hunting song. All of that is also learned through dreams. It's another type of knowledge. Right? Another type of knowledge at work is technology. Also, don't do that, but do it like this. So, to see, to check, they experiment but that is now reality.

Therefore, it has already become reality, so people are already getting to know it. So that's it—fasting, and then later, knowledge. This is also why the Shiwiar peoples' lives are very different since they communicate directly with nature.

In the case of the Urarina, as is also seen in other Indigenous Amazonian communities, the acquisition of new knowledge also operates at a corporeal level, having the senses, the mind, and even organs such as the heart as its locus, modifying the person who acquires it while conserving it in memory,⁵ as Medardo Arahuate points out:

MA: The mind and heart help us to know something. If we need to do something, we have to think and plan with the assistance of the mind and heart. ... The ears and the mind help us to understand something, and we can also perceive in the heart with the help of the ears. If a person doesn't perceive in the heart and in the mind, they can't understand. For example, when I was young, I listened to the stories the elders told but didn't understand because I didn't perceive them with my heart. The same thing happened with music: I listened but didn't perceive, because my ears simply listened but I didn't perceive it with my

5. For an analysis of the localization of thought functions and the dynamics between material and immaterial substances within the framework of Urarina anatomophysiology, see Fabiano (2017, 2019).

heart or my mind. If someone asked me, I didn't know how to reply because I didn't understand anything. With the heart, you perceive something, and this is stored in memory despite the passage of time.

Additionally, Medardo Arahuate highlights a dispositional and deliberate precondition in which individuals must put their pride aside in order to learn:

MA: With the heart, one knows something, so it is necessary to ask to know better. The mind, heart, and ears also help us to know something. Many times our pride does not allow us to know things. As long as we don't put our pride aside and we don't ask questions, we'll never be able to know something. That is why if someone asks us questions about some event or to carry out some activity, we will not be able to give them answers.

What Is the Most Important Knowledge?

As noted in the introduction, although there is a diversity and plurality of knowledge associated with Indigenous groups, there also exist a plurality of perspectives regarding its importance. While there are certain types of knowledge that perhaps should be left aside, as we will explore later, there is also that knowledge that should be closely protected. The importance of this latter type of knowledge is clearly demonstrated through the words of our collaborators, especially in relation to the practical, moral, and ethnic domains. For example, in the following passage, Jorge Caringkia describes the concept of "living well" (*penker pujustin*), in its ethical sense:

JC: How to live. For example, respecting people. Loving our people. And the knowledge of how one *should* be married. These teachings in our knowledge are also very, very important. Acquiring knowledge by drinking *guayusa*.⁶ So we also

6. Among the Chicham- and Quechua-speaking peoples of the Upper Amazon, a tea-like brew made from the leaves of *guayusa* (*Ilex guayusa*) is commonly drunk in the early morning hours by men for its purgative and stimulating effects. During these sessions, men will often talk about

get knowledge through *guayusa*, through teachings. Drinking *chicha*⁷ because we were taught that it was our custom as well. We have acquired that knowledge. ... My grandparents taught me. My father taught me the knowledge well. Also, to work. To respect. To love the people, our brothers. And he taught me with *guayusa*. ... This knowledge that he taught me is the elaboration of *changuina* [basket], house construction. Therefore, they basically taught us in that way. Likewise, how you have to make a garden, how you have to work, how you have to do it. They also taught me to sing. And this knowledge is very important, very important. If you don't know how to sing to your wife, you'll live poorly fighting. Therefore, so that it is not like that, my father and grandfather—my grandfather above all—taught me. That's it. They also taught me how to hunt, to get meat.

Likewise, for Mariano Tsetsekip and Jervacio Gualinga, teaching and learning implies a type of moral conduct that is carried out following norms and values that characterize social living and perpetuate the intergenerational transmission of acquired knowledge:

MT: The most important knowledge my father has left is an education, not contemporary education but a traditional education. To become friends with other people, now, with everything. How to organize and live with a family; or how to govern, that is, how to govern with other people. Right? That is a very particular type of knowledge. So that's most important, what my

dreams they had and try to understand their significance, discuss personal affairs, talk of their recent experiences hunting or fishing, and focus on resolving conflicts between community members.

7. *Chicha*, as it is known in Ecuador, or *masato* in Peru, is a drink made from manioc that is common throughout the Upper Amazon. Women peel and boil manioc roots until they are tender and then mash them in large troughs. As they work, the women chew small portions of the mash and spit it back into the trough, inducing fermentation. The mash is then left in a vessel for a variable amount of time until the desired level of fermentation is reached. *Chicha* is not only a staple food in the diet of the majority of Indigenous peoples throughout the region, but also plays a crucial social role in the reproduction of identities and gender relations.

father had said: “Go son, when I die someday, you will have to go on the path, that is, dieting so that you have power so you can resist life. If you don’t practice that, you’re bad; you can be mocked, you can be a sick man, you can be a person who’s not valued.” So that’s what he gave me, I mean, the knowledge. What he left me. I practice his knowledge; what he taught me.

JG: For me it would be, for me as a person, [the knowledge] from my father, my mother. They have left me the most knowledge ... that being of how to live working. Because if they had not taught me, I would not even have known the beginning or the end. Yes, but now, thanks to my father and grandfather, I have always been saying, “Everything up to now is because they have taught me.” For example, on a job of house construction. Right? Making garden plots, making canoes, et cetera, of those things that they taught me. Traditional art as well, such as blowguns and how we build them. More than anyone, from my uncles, and how they made them. It was quite incredible for me.

For Medardo Arahuate, even the very ability to obtain new knowledge depends on moral habits that are acquired within a framework of processes of socialization in which values such as sincerity, humility, and generosity are emphasized:

MA: To have certain knowledge, you have to try to be a good person and, above all, leave behind pride and selfishness. Otherwise, we will never have good knowledge. Not everyone has the same knowledge, so it is good to seek knowledge from other people by asking questions. For example, my pride and egotism didn’t allow me to acquire certain knowledge because I didn’t approach others to ask. ... Through actions—if a person tells the truth, it is revealed. If it is about learning, it has to be revealed. It shows that what they are saying is true. If it is a lie, then the same thing happens, it is revealed.

Who Has a Lot of Urarina/Shuar/Shiwiari Knowledge?

For our Chicham-speaking collaborators, there is a direct relation between an individual’s age and the level of general knowledge a person

possesses. As Jorge Caringkia notes, in Shuar culture there is a generational heritage of knowledge that is transmitted patrilineally, with older individuals possessing the greatest amount of knowledge:

JC: Those with a lot of knowledge were my father and my grandfather, ... because he was born first. He learned from his father and others as well. He also talked with me and taught me different things.

Mariano Tsetsekip presents a very similar perspective for the Shiwiari, emphasizing that the experiences of elderly community members and ancestors are a means of attaining a greater wealth of knowledge. This is contrasted with the contemporary situation found in Shiwiari communities, where, due to social change, there is now less access to certain experiences and practices, particularly those associated with knowledge related to conflict and warfare.

MT: Well, in Chuintsa, those who had a lot of knowledge were my parents and my grandparents. They had a lot of knowledge since they had been practicing all of their knowledge of hunting and fishing, gathering of fruits, and warfare forever. Warfare, as my grandfather had done—having reduced a *tsantsa* [shrunk trophy head]—he already had that knowledge. They had it then and now who doesn't have it; they're already dying, they've died. Now we don't have the knowledge of shrinking a head, it's very difficult. Now we also don't have the knowledge of how to make war because we have never practiced it. On the other hand, my parents and grandparents, since they were children, have grown up practicing it since childhood, since they were youths, they had already practiced it. They had it. So that knowledge of how to go to war, now it doesn't exist.

Regarding the Urarina, Medardo Arahuate brings in the perspective of nonhuman spirits, observing that these entities have great wisdom, perhaps greater than that of humans. As in many societies in lowland South America, according to the Urarina tradition, the lifeways of these nonhuman beings mirror the human world,⁸ as they live in communities

8. Similar to other Indigenous societies, the Urarina knowledge system includes the belief that in every ecosystem there are spirits, also known

and participate in the same types of social relations as their human counterparts:

MA: [Plants can be wise]; their spirit is that which knows everything. For example, one day my uncle cured me using plants and told me: “*Lupuna* [*Ceiba pentandra*], *catahua* [*Hura crepitans*], *cumala* [*Virola* spp.], et cetera, are good beings.” It’s very true what my uncle told me, all large trees have a spirit and also have spears, bows, et cetera. They can cure us of any illness; they all also cure us well and defend us when someone wants to harm us. They are very wise. [The forest beings] are wiser than human beings are. The spirits of the forest, of the swamp, and the animals with which we feed ourselves have their mother and spirit. The spirits of the beings are wise. For example, the spirits or mother of animals know in advance when human beings want to go hunt animals and the mother hides them, so it’s not good to say, “I’m going to hunt whatever animal,” because their mother hides them. For example, when the howler monkey calls and one says, “I’m going to hunt that howler monkey,” hearing that, its mother hides it. By saying, “I’m going to hunt that animal,” we’re already practically scaring it from its place, we’re touching a branch or tree where it is. Another example: if you have chickens and hear someone say, “I’m going to kill the neighbor’s chicken,” you, as its owner, say, “Someone wants to kill my chicken, go gather up the chickens and put them in their corral.” You hide them like that so that someone doesn’t kill them. That same thing happens with the spirits or mother of the animals—they hide them.

as “owners,” “mothers,” or *neba* (see Dean 2009: 248–49; Walker 2013: 170–71). Their function is to provide protection and to ensure that its nonhuman inhabitants prosper (see Fabiano, Schulz, and Brañas 2021). In addition, the Urarina identify a category of nonhuman entities known as *ijniaene* that, unlike the *neba*, are feared for their aggressiveness. These entities belong to a very broad category of nonhuman beings whose main characteristic is to possess the necessary abilities to pursue and execute pathogenic attacks on humans, using invisible darts or abducting the victim’s *kurii* (spirit) (see Fabiano 2020, 2023).

What Is the Difference between Wisdom and Knowledge?

According to Jorge Caringkia, there are few differences between the notion of knowledge and that of wisdom. However, when one refers to the latter, it is considered to be closely related to knowledge through its cumulative capacity. In other words, what makes someone wise is the capacity to accumulate their knowledge over time and, above all, to be able to transfer that knowledge to others:

JC: I would say that wisdom is the totality of knowledge of a man who knows, who has his wisdom. Right? ... And my theory is that it is, like they say, knowledge is almost the same. For me there almost isn't any difference. He who knows does. And also, by knowing you can have a lot of wisdom, like someone who acquires it through learning. He who has little wisdom has little knowledge. That is what I say. ... He who has a lot of wisdom can teach someone else who doesn't know. So he can teach. He who has a lot of wisdom can teach another person who doesn't know.

For the Shiwiar, much like as seen with the Shuar, with whom they are closely related, knowledge and wisdom are considered to have a very similar nature. According to Mariano Tsetsekip, however, in the Shiwiar tradition wisdom can be considered as a type of "Indigenous science," linked to visions obtained through dreams and the ingestion of psychotropic plants, as well as the total accumulation of knowledge one obtains over one's life. The diverse practices connected to daily life in Shiwiar communities, such as the annual weather cycles, the use of *anent* (magical songs) to ensure success in love or hunting (see Barrett, chapter 10, this volume), and the traditional ecological knowledge associated with plants and animals, characterize Shiwiar conceptions of wisdom, as is illustrated in the following passages:

MT: Wisdom is a science, let's say, a science that human beings have. There is a lot of wisdom, human wisdom, within a person. Right there we know what things are going to happen, that is also wisdom. Let's say that, through a dream, it might be a sign that a snake could bite you, or you dream that you could die as well. That's wisdom, science.

It's also occult science. The shamans here, by means of their occult wisdom, can harm Kurintsa as well. For example, my friend Jervacio, he could hurt the people of Chuindia while he is here through his wisdom.⁹ So that is occult wisdom and, for me, shamans control it. In addition, our wisdom, which we already knew, for example, the seasons before, but now the seasons have changed. There are rainy seasons and dry seasons, so we already knew that well. We now know that in February it's rainy, but our ancestors already calculatedly said that this is the rainy season because the frogs are going to sing. Now it's time for the birds to lay their eggs, it's already known. It's also known that wild fruits are going to start producing.

A type of wisdom that we also have is the song to attract women, or to attract men as well, or at the same time to make them suffer, or divorced people know to make a strategy, a secret song so that their partner returns. It's all an experience of wisdom. The wisdom to cultivate, through songs, the wisdom of hunting and fishing. Therefore, we have all these wisdoms. Each nationality has their way of life and their way of curing illness as well. They know the medicinal plants, the classes of medicinal plants, and how to prepare them. They already have that wisdom. So, that would be wisdom.

JG: Yes, that is, he already said a lot but there is a little more to tell you. Because it's wisdom, everything we have been talking about from the beginning, all of that, is born from human beings, any idea or any practice. Not only that, but sometimes from studying as well, from education. For example, the blowgun. Who invented the blowgun? That is wisdom. It's very difficult; very, very, very difficult. It's just like how they make things in foreign cities, they make an incredible number of things. However, it's the same for us too, the wisdom that we manage allows us to create things. For me, that would be wisdom and it's born from individuals.

Medardo Arahuate, for his part, clearly indicates how for the Urarina, "there are distinct ways for a person to be wise," insofar as

9. Kurintsa, on the Corrientes River, and Chuindia, on the Shionayacu River, are both distant Shiwiari communities.

the simple acquisition and accumulation of knowledge is insufficient to guarantee that these can be used proficiently through concrete practices. In this sense, the transferability of the knowledge acquired, in addition to representing a medium through which to transmit what has been learned, also defines a provision, a requirement of wise men and women.

MA: Wise people have many skills in different fields and can teach or give correct and precise directions to others. You don't necessarily need to consult other people. From all of this it is discovered that a person is wise

The person who understands, who knows how to keep what he has learned in his heart and put it into practice, becomes wise. [These people] can do something that seems impossible. For example, for a person to become a shaman, they need to concentrate on the teachings of their master. A person can be wise in different types of activities. For example, there are people who are wise in the creation of objects, of materials for hunting, in house construction; they do it perfectly because they do what their master taught them. Nevertheless, there are also people who aren't wise, they are those they didn't learn well enough.

What Types of Indigenous Knowledge Could Be Lost?

Although there are many aspects of "traditional" culture our collaborators hope to preserve, as has been shown above, there are others they consider legacies of a bygone era with practices that have been abandoned for various reasons, particularly following conversion to Christianity. As an example of Shuar cultural heritage that has been set aside, in relation to the preparation of *tsantsas*, Jorge Caringkia tells us the following:

JC: We have knowledge. Some of it is good, but there is knowledge that is not good. My parents, my grandparents, I haven't seen it, but they took *tsantsas*. They would cut [off heads] and take out that knowledge. And it was also applicable when an enemy killed. The foods they could make. However, we can't use that knowledge today. We put that aside. Because my grandparents did that. They took *tsantsas*, but God, I say, we can't continue

to do that because we're not living in the interior. Now we can't do that. We must put that knowledge aside.

Among the Shiwiar, on the other hand, although the practices associated with conflict and war, and in particular the preparation of *tsant-sas*, have disappeared over the past century, they continue to be important markers of ethnocultural identity. Therefore, for Mariano Tsetsekip and Jervacio Gualinga, the loss of these cultural practices, associated with the increased presence of missionaries and the subsequent conversion of Shiwiar speakers to Christianity, is related to the loss of cultural identity:

MT: It is very difficult to leave it aside. Of course, the only thing that we already said is that instead of consulting with that man or getting advice, instead of teaching, [the knowledge] died. That knowledge stays there. That library ends; it is difficult. So now, they were saying that the knowledge stayed there, with ancestral knowledge as well as new, modern knowledge, it stays. If we continue with that, then it would stay there forever and we could cultivate another, very different knowledge, from that other world. Therefore, for me it would be losing [that knowledge] but it is difficult to lose it completely.

There are other [knowledges] from religion, I don't know how many. Sometimes religion contradicts me because religion came to end us. They don't plant anymore because God is going to give us everything, that is, God is going to take care of you. So they all give advice or guidance from religion, for religion, so that traditional knowledge no longer exists. They continue to forget everything and no longer practice. Religion has almost made us lose our way of life, because they already came with another belief system, with another religion, with another life. So they practically scared us: if you sing songs (*anent*), God is going to punish you. Then just with that, religion weakened our own culture and customs.

JG: Yes, but that's not to say that it's totally lost, because there is not much knowledge that has been lost but very little—a little bit but not much. Because if we want to practice that, or go do that, we can, because there is not much that we have really lost.

Is It Possible to Gain Knowledge through Dreams and Visions?

As previously mentioned, dreams and visions are central to the Indigenous epistemologies of the Chicham-speaking peoples of the Ecuadorian Amazon. Dreams, known as *kara* in the Chicham languages, are clearly differentiated from the visions, or *waymankamau*, experienced after ingesting psychoactive plants such as *maikua* (*Brugmansia suaveolens*) or *natém* (*Banisteriopsis caapi*). In the following, Jorge Caringkia presents some examples of the imagery that arises when someone dreams and the typical ways in which Chicham speakers interpret it:

JC: Some knowledge is also obtained through dreams. Yes, one can have knowledge in dreams. For example, when one wakes up dreaming about a person fighting, that means that you are going to kill a peccary the next day. If I wake up dreaming about a person, I believe that is going to happen. That has happened to me! If I dream about my girlfriend, that means she doesn't love me. Another dream as well: if you wake up fighting a jaguar, a peccary, or a dog, that means that someone is going to hit you. What they are going to do to you is evil. That is why when we dream we are always ready and alert to what is going to happen to us.

[When you dream about a jaguar,] you are going to meet a wild person who will talk to you. They're going to hit you, it's about hitting.

Like dreams, visions resulting from the intoxicating effects of various psychoactive plants are also crucial, according to Jorge Caringkia:

JC: If you drink *natém*, if you drink *malikua* [*maikua*], they will also give you visions of what is going to happen in the future. For example, I drank *natém*, and what I wanted to see was my brother and how he was. But it was presented to me while drinking *natém*. Some men came bringing a person who was bitten by a snake. He was dead. They said that they were bringing a man, a young man, bitten by a snake. I was seeing that while drinking *natém*. And in fact it happened to me that my brother, some years later, died after being bitten on

his finger. Dead! And it was true. Drinking *natém*, drinking *malikua*, just as there are bad dreams, there may be experiences that are resolved negatively. But it's not reliable. If one doesn't fast, *natém* can give one bad visions, and likewise with *malikua*. That happened to me because I didn't fast, because I ate food, I drank *chicha*. And afterwards I drank three of those thick cups of *natém*. As I had already eaten, it didn't intoxicate me, so I drank three times! I even saw God as well. Drinking *natém*, I saw God. I arrived at the door to God's home and an angel, a person, told me, "Only spirits arrive here. Only by dying does someone arrive here." So, he said, "At the moment, only spirits; People are not allowed." It was a beautiful house. I saw that. Those are good dreams.

For Mariano Tsetsekip, dreams provide information that reveals the future. Normally related to different topics, such as success in hunting or meeting other people, dream images reveal what may happen after the dream and if there will be a positive or negative outcome. To make sense of a dream, however, it needs to be properly interpreted.

MT: Dreams like that, simple ones, we could say local dreams, are when you are asleep in your bed. That is when you dream about things that are going to happen that day ... They may be bad dreams or good dreams, so even if you are old or if you are younger, you have to find a wise person and tell them, "I dreamed this," so that they give you guidance ...

For example, that elder had dreamed something and it coincides with that dream, and he says, "I dreamed of picking products, or fruits, whatever, but you pick up a full basket like that. That means that you're going to have luck in hunting when you go." Then the elder, the wise person, says, "Ah, okay, very good. This is going to happen to you, this, this, or this." He's also going to teach you and that's how it is. Will it be a good or bad dream? No, no, no, you had a bad dream so you cannot go and work because you would be risking being bit by a snake, or you could fall, or have an accident. Therefore, you stay home, give up your plans, and do it another day. Then sometimes they say that shamans also dream and tell their friend, "It happened to me like this." Because of that they want to kill you, it's better if you don't go.

Just like with dreams, the visions produced through the ingestion of psychoactive plants are of vital importance in Shiwiar culture. As Mariano Tsetsekip details, the visions one has after drinking *natém* or *maikua* can provide an individual with information about their future path in life, such as becoming a political leader or a shaman. Likewise, the visions produced through these plants also make it possible to identify possible threats as well as the individuals who are guilty of having killed relatives. Finally, these visions are also protective in many ways, providing a kind of divinatory power to defend against future attacks.

JH: You always want another person's perspective ...

MT: Exactly, because they already know their dreams. Right? That dream that I had dreamed, he had also already dreamed that in the past. So, he already has experience about that dream, that local dream. I say it like that but it is my personal concept. A powerful dream, however, like when you are drinking *natém*, that won't tell you that you're going to find game animals. So that vision, also, can tell you that someday you might become a good hunter. It can also tell you that in the future you will be a politician or a leader. It can also tell you that you can be a warrior, that you can be a shaman. That's different. Also, when you drank [*natém*] when your son, or your wife, or your father died, then it tells you that a particular shaman had bewitched you. So sometimes, it gives you indications or preconceptions, also telling you that a person is going to die. Then you already know. So, it gives you some indications, that's what it is.

For example, I can tell you that at least I could have seen it like that, drinking *maikua*, killing a person, but they will never kill me. It is clear that threats will arise. For them, however, I have power from my visions because I have drunk *natém* or *maikua*. With those visions, with that power, I have done it. So they think of attacking me, but they never attack because I clearly have that power. So, more or less, it goes like that, and bit by bit the people calm down, the problems calm down and pass. So, those are visions and there are simple dreams for others which could be about hunting or other activities.

Notes about the Urarina, Shuar, and Shiwiar Communities

The Urarina peoples live in the Chambira, Urituyacu, and Corrientes basins, a large region of tropical humid forest north of the Marañón River (Peruvian Amazon). The census information for this group is incomplete, but there is an estimated population of some six thousand to eight thousand people. For many years, the Indigenous peoples of this area, who call themselves *Urarinaaürü*, commonly known as the Urarina, have been frequently associated with linguistic groups found in the bordering regions. Only thanks to recent studies has it been concluded that the Urarina language (*kacha eje*) is a linguistic isolate without any affiliation to any other known language family. Despite their long history of contacts and relations with Peruvian society, the Urarina people have maintained a very strong ethnocultural identity. The Urarina language is still very vital and is commonly spoken in daily life, while Spanish use is limited to commercial relations with riverine communities and regional institutions. During the first half of the twentieth century, there was an increase in plantations managed as small agroextractive holdings under the control of *patrones*, who in many cases settled along the Chambira River. The *habilitación* system continued flourishing until the end of the 1970s, when the system of patron–client relations began to decline, but without disappearing completely. Today this structure of exploitation of Indigenous labor has undergone changes due to the expansion of a growing competitive mercantilism in which “small *patrones*” and itinerant merchants negotiate directly with communities. This has coincided with a new era of extractivism of lumber resources, in many cases fraudulently obtaining authorization from local authorities. In recent years, the number of oil spills generated by the operation of Block 8, located in the District of Urarinas, has affected and continues to affect Indigenous and riverine communities, highlighting the urgency of a shared solution to these socioenvironmental problems.¹⁰

The Shuar are a Chicham-speaking people whose territory is found in the Morona, Santiago, Upano, and Pastaza basins in southeastern Ecuador. With more than fifty thousand speakers, the Shuar are the largest Chicham-speaking Indigenous group. In the ethnological

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10. For an in-depth analysis of the effects of extractivist processes in the lower Chambira region (Loreto Region, Peruvian Amazon) based on the case of an Urarina community affected by the oil industry, see Andueza et al. (2023) and Fabiano (2020)

literature, these Amazonian peoples are known for their fierce resistance to contact with the exterior during the colonial and early Republican periods. Members of Shuar communities have traditionally lived in dispersed settlements within interfluvial regions and have based their subsistence on a combination of hunting, fishing, and swidden agriculture. These autonomous groups, led by elder men (*untä*), were often involved in wars and disputes with other Shuar and Chicham-speaking groups, as well as groups from other language families. However, beginning at the end of the nineteenth century, with the increased presence of missionaries in their traditional territories along with greater contact with the national Ecuadorian society, the Shuar began to organize themselves, ultimately founding the first Indigenous political organization in the Upper Amazon, the Federación Interprovincial de Centros Shuar, in 1964. With the foundation of this Indigenous organization, the Shuar have increasingly begun to live in larger settled communities, known as *centros*, instead of continuing to live in dispersed homes in interfluvial regions. They have also been politically active, fighting for their territorial rights against the Ecuadorian state and continued settler colonialism. Today, the Shuar, like other Indigenous peoples in the Upper Amazon, have been transforming their own lifeways as a result of the increased presence of practices characteristic of the market economy, which has expanded through infrastructural development by the state, NGOs, missionaries, and even the communities themselves. The introduction of roads, the internet, running water, electricity, among many others, has produced radical transformations in their culture. As such, once-traditional practices, such as hunting, are being pushed to the wayside when compared with the incidence of practices such as the sale of lumber, the development of small shops dedicated to the sale of packaged products from urban centers, sporadic wage labor, or even medium-scale agricultural projects like the sale of dragon fruit for export, increasingly seen in some parts of Morona Santiago.

The Shiwiari, like the Shuar, are a Chicham-speaking group whose members primarily live in the interfluvial region between the Pastaza River and the Tigre River in the Upper Amazon of Peru and Ecuador. With roughly one thousand two hundred individuals living within the two countries, with the majority living in Ecuador, the Shiwiari have the smallest population of any of the Chicham-speaking peoples. Their traditional territory was forcibly divided with the demarcation of the border in the Amazonian region following the 1941 war between Peru and Ecuador. Unfortunately, our knowledge of the Shiwiari people's

history is limited, due to the mobility of individuals following the war along with the lack of any type of state presence in the region prior to the conflict. According to information collected by the Salesian priest Luis Bolla (2003: 39), the Shiwiar arrived in the Corrientes basin at the end of the nineteenth century due to ongoing conflict with Achuar on the Pastaza. As with other Chicham-speaking peoples, the Shiwiar base their subsistence in a combination of hunting, fishing, foraging, and swidden horticulture. Likewise, some individuals participate in wage labor activities in the nearby city of Puyo. Although they have traditionally lived in dispersed homes led by an elder man (*huunt*), today the majority of the Shiwiar live in communities along the Corrientes and Conambo Rivers in Ecuador, and along the Corrientes River and its tributaries in Peru. Although many communities in Peru are accessible via river, most of the Ecuadorian Shiwiar communities are only accessible via plane or overland trails.

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POSTFACE

Language and Culture: The Plot Thickens ...

Laura Rival

“Not so long ago, it would have been considered self-evidently true, by the vast majority of anthropologists, that human cultures owe their very existence to language.” This is how Tim Ingold (1996: 122–23) starts his introduction to the 1991 GDAT (Group for Debates in Anthropological Theory) debate, before concluding: “The debate that follows ... opens up a Pandora’s box of doubts and queries that are crying out for attention. When it comes to language and culture, it seems that anthropology will have to go back to the drawing board. To sort out all the issues raised in this debate will keep us occupied for many years to come” (1996: 125). It has undoubtedly occupied Tim ever since. The prolific anthropologist has endowed us with a profusion of written works on the corporeal, developmental pragmatics of culture, which can be read as continuous attempts to demonstrate that *Homo sapiens* is not a living species made of “body-plus” organisms. The contributors to this book are not interested in disproving the culture-added-onto-nature thesis. Rather, they propose to investigate how the production and understanding of knowledge are shaped by culture *and* language. They do so by questioning the ontological status of language itself from within very specific “languacultures” of South America’s Andean and Amazon regions, as well as by approaching knowledge through its transmission via learning and teaching.

To fully appreciate the novel way in which this volume contributes to long-standing theoretical debates on language, culture, and knowledge, I have read each chapter attentively alongside key pioneer works, such as Jean-Pierre Chaumeil's (1993) ethnography of Yagua acoustics and Nurit Bird-David's (1999) discussion of relational epistemologies, while revisiting my own ethnographic work on the Waorani.¹ As Chaumeil shows, to honor the Yagua's own understandings of language and speech, we must attend to the distinction they make between what the ancestors know and tell (in a language rich in allegories) and what the shamans and song owners know and tell (in a language full of onomatopoeia). Moreover, we must appreciate that both music and musical instruments implicitly convey a Yagua theory of language. Bird-David's seminal article details the practices through which Nayaka people become "attentive to, and work towards making, relatedness" (1999: s73). In so doing, the Nayaka get to know each other and the world around them, a world they share intimately with *devaru* ("other-than-humans"). Bird-David, who interprets *devaru* as objectifications of "we-ness" (1999: S74–75), goes on to theorize animism as a relational epistemology. This epistemology triggers "a two-way responsive relatedness" between ego and another "person," regardless of whether the latter is a tree, an elephant, or another fellow human being (Bird-David 1999: S77). Animism comes in the plural, for there are many different ways of sustaining relational epistemologies that function "with, against, and sometimes despite other local authoritative epistemologies." Developing the skills of being-in-the-world with others is what knowledge is all about in the animist mode of knowing (Bird-David 1999: S78). Animisms, Bird-David concludes, "are engendered neither by confusion nor by wrong guesses but by the employment of human socially biased cognitive skills" (1999: S69). Whereas the richness of linguistic and ethnographic data in Chaumeil's article allows us to appreciate how far a representationalist concept of culture (Risjord 2022: 134) gets us in terms of appreciating animism as an authoritative epistemology, Bird-David's piece gifts us a wealth of critical engagement with epistemological questions. It is perfectly possible to appreciate perception as ecological, or cognition as

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1. See Rival (2016: 21–23, 31–34, 73–90, 244–50, and 255–59). In the build-up to the Tagaeri–Taromenani case brought to the Inter-American Court of Human Rights against Ecuador, the leaders of the NAWE (Nacionalidad Waorani del Ecuador) asked me to stop using the spelling "Huorani."

embodied, embedded, enactive, and extended, without having to treat such questions as ontological ones (Risjord 2022: 138). Culture may be a hopelessly polysemic concept, but there is no need to do without it entirely to apprehend language, thought, perception, and action as arising relationally. On the whole, Indigenous scholarship apprehends culture as central to human ways of life (Chellappoo 2022: 208; Kimmerer 2013). Once we acknowledge that culture is everywhere, not least among modern scientists, epistemic values can be examined critically and challenged where and when necessary (Haack 2007; Jasanoff 2019; Nowotny, Scott, and Gibbons 2001).

Method

Dedicated attention to people's attitudes towards their own knowledge practices animates each of the contributions, whether they are written by ethnographers (with or without their Indigenous collaborators), linguists, philosophers, or local experts from Andean and Amazonian communities. In fact, one aim of the book is to actively transcend disciplinary boundaries. Philosophers are usually tasked with discussing the ways in which the philosophical literature approaches knowledge, especially its universalizing tendencies; anthropologists with exploring "cosmovisions" and the culturing of human experience (including the ways in which the latter may shape the former); and linguists with bringing technical expertise to the empirical apprehension of the interface between linguistic structures and concepts. As this collection of essays amply demonstrates, combining methodologies across established disciplines is the only way to research how knowledge, wisdom, and understanding are conceptualized within specific cultural traditions. While fieldworkers engage in conceptual, epistemological work, theorists adopt experimental protocols. Linguists, who, like anthropologists, combine field data with comparative analyses, also address policy matters, such as the design of bilingual education programs. The book's ambition is to show that inclusion of the voices of Indigenous linguistic and cultural experts enriches such efforts. These Indigenous experts, through their collaboration with academics, have found unique ways of exploring how knowledge, wisdom, and understanding can be conceptualized within their own cultural traditions.

Methodological innovation is crucial to the project of making visible what Andean and Amazonian Indigenous traditions might have to

offer to scholarly communities—not least philosophy—that have until now largely overlooked them. For Michael Cepek and Cesario Lucitante (a renowned Cofán shaman who has spent years educating Cepek in the arts of listening to the A'ingae language), renewing method requires approaching shamanic cosmovision dialogically. For the anthropologist, this entails focusing on his collaborator's own depictions before engaging with fundamental questions regarding human understanding. To be successful, such an approach demands that the anthropologist pays attention to the relationship between specific depictions and observable, immediate experiences, as well as to how his collaborator reports the experiences of other cultural consultants. Finally, the anthropologist and the cultural consultant need to enter in a conversation about each other's interpretation of Indigenous depictions. They also need to agree on how they will jointly treat the data gathered and engage in broader speculation about their empirical findings.

For David Fleck, the method of long-term study of the Matses language based on natural speech data (drawn from an electronic database of sixty-four hours of audio recordings with transcriptions and translations) may not be “novel.” It is, however, an optimal way of doing linguistics. This classic field method combines living in a Matses village, interviewing elders at length, and producing (in addition to academic papers) a comprehensive grammar and two dictionaries, both of considerable use to Matses teachers and intellectuals. Fleck's thesis that the Matses consider learning and teaching to be associated with body parts is grounded in rich empirical data documenting how Matses speakers talk about teaching and learning, which an anthropologist like me may productively revisit. Thanks to the clarity and quality of the data presented by Fleck, I can propose to him that “*Cho-Ø, mibi in-kiak-nu*” could be translated as “I'll show your penis how to have sex ... sex that makes a girl happy,” rather than “Come, I will teach you to have sex.” At least, this is how a Waorani would go about the notion of “teach[ing] you at your penis.”

Methodological innovation for Clark Barrett consists in juxtaposing and analyzing comparatively (and somewhat speculatively) two instances of autoethnography, with the goal of “squeeze[ing] understanding” from his own situated point of view. As Barrett specifies, the rationale for comparing *anents* and statistics is that both rely on belief, trust, respect, and expertise. Better positioned, and starting from an examination of the very awareness that people may have of the state of incomplete knowledge, he can then discuss with greater insight what such partiality

may bring about. This is far from anodyne, given that the experience of indeterminacy is a common occurrence, even if it has been largely overlooked in philosophy. Barrett argues that new ways of experimenting with thought processes allow us to dwell on “the tacit dimension” of knowledge. This issue has long preoccupied anthropologists (Bloch 1992). What the experimental philosopher brings to anthropology on this matter is a rigorous attention to the epistemic conditions under which knowledge is experienced as uncertain. Equipped with a good description of both linguistic performance and epistemic conditions, the anthropologist may now be tasked with focusing more specifically on a community’s willingness to trust (or not) the authority of its elders, ancestors, and experts.

Finally, Medardo Arahuate and his coauthors bring to method not just the novelty of transcribed conversations among Indigenous linguistic consultants, but also, more importantly, what Francisco Sarmiento (2023: 81) would call “different perspectives mutually shared.” By deepening immersion in one another’s understanding of human understanding, these research projects vividly illustrate how “awareness becomes a matter of method” (Cattelino and Simpson 2022: 371).

Shamanic Knowledge

Shamanic epistemics and the ontological foundations of animism are some of the reasons why Amazonia has been flagged (perhaps more than any other region of the world) as a place where anthropology must reassert its commitment to the understanding of (radical) difference. How different is Amazonian shamanic knowledge? And different from what, given the many studies focusing on its intrinsically transcultural characteristics? A concern with *how* to know, rather than *what* to know, makes shamanic knowledge a perfect candidate to explore the partiality and indeterminacy of knowledge.

The book is full of hints as to the embodied cultural processes involved in shamanic ways of knowing, as well as to the learning, teaching, and communication techniques involved in its transmission. Although not directly related to shamanism, Fleck’s discussion of the embodied nature of teaching and learning among the Matsigenka comes to mind as well. As discussed by Cepek and Lucitante, the pragmatics of shamanic knowledge center on learning/teaching symmetry: the motivation to teach is mirrored in the motivation to learn. Knowledge is felt in the

flesh, as it were, with, in the Cofán case at least, no clear distinction between in, on, or outside one's body; what matters is the embodied capacity to act. No need, thus, to invoke movement as a better concept (Mezzenzana 2018). Not only is shamanic knowledge "acted out" on the basis of direct, personal, *and acquired* experience, but it is also driven by a compelling desire to help people cure. Amy Leia McLachlan's ethnography of forced displacement among the Uitoto approaches knowledge embodiment from a different angle. If sacred shamanic plants such as coca, tobacco, or manioc are now acquired in the form of raw materials derived from commodified, industrially produced crops, the knowledge that informs their processing remains genuinely Uitoto. More, it signals creative adaptation, as Uitoto forms and channels of circulation of plant substances in Bogotá materialize feminine modes of knowing that are subdued in Uitoto land. McLachlan leaves the reader in the dark, though, as to how such innovations will be transmitted, if at all.

Cepek and Lucitante remark that healing others demands profound, complex ways of seeing. Esther Jean Langdon's discussion of historical transformations and continuities in Siona shamanism takes this point further by elaborating on communicative contexts, linguistic choices, narrative styles, and Siona interpretations of the symbols involved in dreaming and yagé ceremonies. She highlights structural and semantic similarities between dream narratives and yagé journeys. Together, these two ways of creating and communicating shamanic knowledge constitute the cultural foundation of what could be described as "Siona commons." While both are available to all Siona, only shamans who fast repeatedly (*hacen dieta*) and undergo a long apprenticeship have the power to cultivate this knowledge so that it attains specialized, expert, and accomplished forms. Yagé journeys and dreaming educate the attention, a necessary step towards knowing about invisible parts of reality and deriving powers from this. Langdon's chapter makes it clear that Siona people experience the invisible side of reality sensorially through their bodies, which play a key role in dreaming, language maintenance, and knowledge transmission. Dreams are to be shared, she insists. Shared in everyday conversation, dreams are part of what keeps language and culture alive. Interpreted with and by others, dreams serve as practical guides to action. Encounters between "soul" and "spirits" influence social bonding. The overlap between dreaming and waking life is thus significant.

The difference that long, embodied training makes becomes crystal clear in the moments when everyday cultural knowledge rubs against

shamanic expertise. For example, as reported by Cepek and Lucitante, Cofán shamans say that they mimic the language of “other-than-humans” encountered during yagé-induced trances or in dreams. This explains why shamans use linguistic forms that ordinary people cannot understand. This is also why “[t]hough nonshamans can hear the chanting [of *cocoya* (demons)], only shamans can understand it.” The link between nonhuman-to-shaman and shaman-to-ordinary-human channels of communication is a fascinating issue that Medardo Arahuate and his coauthors address indirectly when they remark that action depends on someone “who has a lot of wisdom [teaching] another person who doesn’t know” (Jorge Caringkia, quoted in Arahuate et al., this volume). Shamans act as intermediaries in the chain of communication between spirits and ordinary people. If (or when) the latter become shamans, they, too, will have to transmit the knowledge they have personally acquired and grown. It is in this way that both culture and language keep going. The chapter by Arahuate and coauthors also emphasizes a concern with the mechanisms of intergenerational transmission, apprehended as a means to preserve cultural tradition in such a way that it becomes possible to combine foreign knowledge (non-Indigenous) and cultural knowledge (Indigenous). The vitality of power that comes from continuing the practice of tradition is discussed further later on in the chapter. The evocative phrase “during the fast, other new knowledge is born” has stayed with me (Mariano Tsetsekip, quoted in Arahuate et al., this volume). The conversations reported by Arahuate open exciting new possibilities to interpret the ways in which language and knowledge interact in shamanistic cosmovision.

Even if raised in an entirely different context, Sandhya Kritika Narayanan’s remark about the lack of one-to-one correspondence between language and social identity is noteworthy. In her chapter, Narayanan argues that social identity and geographic connections are indexical values derived from the ideologization of Quechua and Aymara as distinct languages. I wonder whether her exploration of the consequences that result from a semiotic reconfiguration between language, social difference, and local landscape in the Department of Puno could be further enriched by attending to the landscape’s shamanic resonance. As Arahuate and coauthors remark, a respected shaman is someone who has received powers from his teachers *as well as directly* from plant spirits.

If Amazonianist anthropologists tend to apprehend shamanic knowledge as fundamentally transcultural, its current “globalization” through “ayahuasca mania” has led to new encounters between what Arahuate

would call “proper” (*propio*) and foreign (*exógeno*) forms of shamanic apprenticeship. Ayahuasca, a hallucinogenic plant mixture indigenous to western Amazonia, is used today by new kinds of shamans. Although neither Cepek and Lucitante nor Langdon elaborates on the practices of non-Cofán or non-Siona shaman apprentices, they could have chosen to do so. For comparative purposes, Evgenia Fotiou (2020) shows how (and why) tourism has intensified shamanic warfare in the Peruvian Amazon. Frédérique Apffel-Marglin and Randy Chung Gonzales (2022) offer a complementary illustration of the complex play of mirrors between native Amazonian, *mestizo*, and European shamanic entanglements. These fascinating case studies share several common features. This prompts me to ask: Why? Are we faced with the same:

- embodied nature of shamanic knowledge;
- centrality of fasting in preparing the body to learn;
- “felt in the flesh” nature of the changes the shaman apprentice undergoes as he acquires knowledge from plant spirits guardians;
- intense desire to become a channel for healing;
- or wars waged to “remain on the good path” while protecting oneself from sorcery and evil?

Beneath this apparent similarity lies one noticeable difference, though: the degree of “intellectualization.” Multicultural exposure or greater bilingual abilities lead shaman apprentices to “intellectualize” their shamanic experiences, and this regardless of whether their accounts are communicated orally or in writing.

What Is Multilingualism?

The theoretical contributions of Narayanan, Hauck, Pablo Quintanilla, and Maria Ines Silenzi enhance what we already know about Abya Yala’s linguistic richness. With their common focus on bilingual socialization and multilingualism, these contributions facilitate regional comparative discussions. I would be tempted to push Quintanilla and Silenzi to develop their arguments on Andean languages further by teasing out some lingering assumptions about monolingualism and the (post)colonial historical trajectories of Andean Indigenous languages. However, I will keep my comments to the region I know best, the Amazon, a so-called linguistic treasure trove that has yet to fully

reveal its marvels. When in the field among the Waorani in the early 1990s for my doctoral research, I was equipped with basic linguistic training. I knew that the structures and categories of Amazonian languages often contradict academic assumptions about what is possible or not in language, such as word order, for example. But nothing had prepared me for the plasticity and concreteness of *Wao tededo* (literally, the speech of the true human beings), or the endless possibilities of this agglutinating, synthetic, and “primarily suffixing language,” whose verbs “take marking for person, tense, aspect, and mood” (Fawcett 2018: 5). I sometimes joke with my Waorani friends that I may have enriched *Wao tededo* by endowing it with a new dialect, *daoda tededo* (Laura’s speech). What matters, though, is that we tend to understand each other overall, except on the rare occasions when Waorani speakers bar me from understanding what they say by suddenly speaking much faster or by using “verlan-type” techniques, such as reversing the order of syllables or morphemes. They are savvy at warding off *cohuodi* (non-Waorani) interest in their business, especially in moments of tense political negotiations.

This book builds on the legacy of earlier linguistic and anthropological studies by luminaries such as Joel Sherzer, Ellen Basso, Janis Nuckolls, Patience Epps, and Eduardo Kohn, while, as already mentioned, pioneering novel, integrative efforts. Hauck argues that the best way forward is to revisit debates that predate the “ontological turn,” while keeping in mind that native American linguistic diversity matters ontologically precisely because “[p]hilosophical concepts from the Global South are expressed in local languages and we should not assume them to be necessarily commensurable with their translational counterparts in European languages.” Tasked with acknowledging—and accepting as a real possibility—that Western conceptions of language may be inadequate or at least insufficient to grasp “linguistic natures” the authors of this book variously combine insights from philology, semantics, descriptive linguistics, psychology (cognitive and otherwise), and philosophy of science. A tension nevertheless remains between approaches which attempt to renew explanation of panhuman predispositions and those which are bent on demonstrating that what matters the most for philosophical reasoning is difference. Hauck, for instance, argues that vastly different philosophies of language may coexist within a multilingual community (Hauck and Heurich 2018).

Starting with the theoretical position that asserts the nonequivalence of languages, it is easy to see how Hauck (who follows Magnus

Course's analysis of Spanish/Mapuche bilingualism)² would critically engage with Quintanilla or Silenzi. He would say that these authors should start from the principle that internal "ontological diversity of language" matters. An Indigenous native speaker may perceive their mother tongue and Spanish as ontologically nonequivalent. It is therefore no longer sufficient to posit the indissolubility of language and culture, or their mutual implication in each other's continued creation. For Hauck, such a position does very little to challenge the universality of language as a unique, transspecies human capacity for symbolic communication. He would add that "language, as an indexical phenomenon, is inherently ambivalent" (Hauck 2023, 19). To respect ethnographic complexity, we must remain open to a plurality of ways of communication within and between kinds of meaning-making agents. Linguists Janis Nuckolls (2022) and Patience Epps (2021) similarly opine that it is time we looked beyond conventional Western metaphysics of language. Nuckolls's solution is to deploy a series of analytical and interpretive frameworks that attend to both ontological specificity and panhuman predispositions at once. Seen through such a lens, ideophones both represent the world and are an intrinsic part of it. When I lecture on "the ontological turn," I often make use of Nuckolls's (2010) and Brent Berlin's (2006) contrastive, yet complementary, approaches to onomatopoeic words. Berlin stresses that names given to natural kinds in native Amazonian languages tend to associate sounds with movement, shape, and size. This leads him to argue that the relation of sound to meaning is not entirely arbitrary. In Berlin's view, evolutionary phonology adequately explains the emergence of particular sounds and sound patterns, for human languages are grounded in the biomechanics of articulation and perception. These are, to some extent, predictable and independent of cultural considerations. He then generalizes his observations to talk about language acquisition during child development. The convention a child must acquire, he concludes, is considerably constrained by iconic principles of sound symbolism, reflecting properties of the referent, such as size and quality of movement. Nuckolls has a different interpretation of the perceptual properties of phonesthesia and of their use in naming plants and animals. She does

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2. "Languages differ in their degree of materiality and agency. ... Spanish and other non-Mapuche languages are indeed arbitrary systems of signs representing things in the world, whereas Mapudungun is part of the world itself, a force that exceeds human intention and agency" (Course 2018: 12).

not deny that these properties give an intuitive and natural grounding to ethnozoological vocabularies, nor does she underplay the mnemonic function of onomatopoeic terms, or their importance in Indigenous classifications of nonhuman life. What she claims, rather, is that languages rich in ideophones should be analyzed for their specific linguistic ideologies, rather than for their universal properties. In her 2010 analysis of Kichwa ideophones and other forms of sound-symbolic communication, she argued that Runa cosmological animacy gets expressed through morphology, agreement, and other grammatical features, as well as through sound patterns such as word repetition, elongation, and changes in intonation and stress, which all point to meaning. This led her to conclude that the spread of sound patterns in a speech community is largely a social process connecting particular ways of speaking with particular people. Her recent iteration of this thesis adds mindfulness and meditation to the toolkit for interpreting linguistic praxis and the material realities of Kichwa life. In reanalyzing why and how ideophones “give a sense of life to language” Nuckolls (2022: 295) foregrounds perspectivism, while clinging to broader existential considerations: “The claim that Kichwa speakers can momentarily become another type of being by articulating the rising and falling of sensory experiences with ideophones resonates with descriptions of mindfulness and meditation practices in various traditions” (2022: 300).

The metaphysical ground for emplacing Kichwa “languaculture” within Buddhist tradition rather than within scientific naturalism is justified in terms of various Buddhist mind/world conceptualizations, as well as new scientific studies of the self. According to the former, ordinary perceptions must be attended to as “one way of achieving transcendent knowledge of nature and of humans’ place within it” (Nuckolls 2022: 298). Whether Hauck would agree that Kichwa speakers “are mindfully and meditatively attending to the rising and falling of ordinary perceptions, and giving a voice to the dynamic nature of their loved realities” (Nuckolls 2022: 295) is another matter. As I have argued, we do not have to choose between Lévi-Strauss or Berlin (Rival 2016: 88–89); we do not have to choose between Nuckolls and Hauck either. As David Harrison (2023: 115) states, we urgently need new, nonanthropocentric ways of conceptualizing the relationship between language and environment, which, in the case of Tuvan language, is one of *unity*.

If few would defend today the thesis that linguistic communication is reducible to a panhuman, partly arbitrary sign system, we still lack an ethnographically grounded approach to study linguistic diversity and,

more importantly, “a culturally articulated view of multilingual practice” (Epps 2021: 905). I bring in Epps’s fascinating argument here because it helps engage Hauck critically on another languacultural front, that of sociolinguistics. With the help of the useful controlled comparison approach developed by Peter Rivière (Rival and Whitehead 2001: 8–9), Epps examines a range of multilingual settings and interactions before reaching the conclusion that “a robust understanding of linguistic diversity and multilingualism must embrace not only ‘languages’ but also a wider range of ‘lects’ and registers within their particular contexts of use” (2021: 905). Epps therefore renews the research questions we need to bring to the field: Why and how do speakers use linguistic variables to index contrastive social identities? How conscious are they of doing so? And what explanations do they give for their specific brands of multilingual practices? For Epps, as for Nuckolls, the challenge is to reconcile universalist assumptions in linguistics with ontological difference in anthropology. In Amazonia, it is “perspectivism” that is presumed to prevail. Moreover, Epps needs to counter presumptions of monolingualism as the (evolutionary) norm:

The dynamics of multilingualism in Amazonian communities are guided on many levels by this conceptual system (‘familiarizing predation’). The emphasis on active identity construction, coupled with a particular set of cultural schemas for understanding social boundaries, can be understood to reify and maintain linguistic differences—limiting wholesale language shifts and potentially encouraging further differentiation in particular contexts. (Epps 2021: 905)

If Epps’s solution to the Amazonian multilingual mystery thickens the plot, it does not quite yet offer a full view of language maintenance in pluralist contexts. What is missing here is a discussion of what Robin Wall Kimmerer (2013) calls “bilingualism,” that is, the capacity to hold two very different ways of “worlding the world” not just in parallel, but also in permanent communication with each other. In Kimmerer’s case, these are Indigenous knowledge and plant sciences. Her approach, like that of other Indigenous scholars, is profoundly motivated (Bang, Marin, and Medin 2018; Barry et al. 2023). We may go further and argue that Indigenous scholarship makes a substantial contribution to knowledge because it contends that “the practice of excluding the values and methods of Indigenous science from science and from society more generally poses significant dangers, not only to Indigenous peoples but also

to all peoples. Further, these exclusionary practices unnecessarily reify tensions and conflicts between communities” (Bang, Marin, and Medin 2018: 151).

What distinguishes Indigenous research is the fact that it is motivated by values which orientate communication within and across socio-linguistic boundaries. This is why the chapter by Arahuate and coauthors emphasizes interculturality, an antihegemonic project led by Indigenous scholars *for all*. This is also why Sarmiento aspires to make anthropology intercultural, while showing that the discipline will not lose quality, scientific rigor, or value when embracing Indigenous scholarship: “The issue of the quality of indigenous research can lead us to recognize indigenous inquiry and communication procedures and models, even when they mobilize their own epistemologies simultaneously with conventional techniques and theories as they see fit” (2023: 80).

Conclusion

The last sixty years have seen unprecedented efforts worldwide to open spaces for the flourishing of scholarly work produced by nonmainstream knowledge holders, in particular that of Indigenous peoples. As Indigenous cultural productions circulate across varied audiences, they disrupt numerous boundaries and divisions, especially those between academic disciplines; higher and secondary (or even primary) education; science and art; and academia and activism. If the bulk of this circulation concerns mainly English-speaking countries still (English has become the world’s lingua franca of science, business, and academia), research, teaching, and cultural programs from globally less prominent regions in South America, Asia, and Africa are becoming equally vibrant. This edited volume contributes to creating greater awareness of the fact that Indigenous pedagogies, methodologies, and ways of knowing have persisted in many diverse ways in the Andean and Amazonian regions of South America. Each chapter illustrates how to better appraise Indigenous contributions to academic scholarship, while safeguarding against appropriation. For Indigenous communities conscious of having inherited fragments of smashed knowledge, weaving back what has been torn apart often requires struggle (Rival 2024). Indigenous languages uniquely encode the natural environment “in ways that may be experienced and lived but not easily translated” (Harrison 2023: 115). This realization is perhaps what motivated Ingold to focus on “affordance” rather

than on “metaphor,” thus moving anthropology away from language and culture in the process. As this collection of essays attests, a new generation of anthropologists, linguists, philosophers, and Indigenous scholars are, on the contrary, going back to culture, and taking it seriously. In so doing, they are engaging in many different kinds of translation, while at the same time redefining what intercultural equivocation might bring to the scientific endeavour (Furlan et al. 2020).

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