
CONTENTS

<i>Acknowledgments</i>	viii
Introduction: <i>Runa Puma</i>	1
1. The Open Whole	27
2. The Living Thought	71
3. Soul Blindness	103
4. Trans-Species Pidgins	131
5. Form's Effortless Efficacy	153
6. 'The Living Future (and the Imponderable Weight of the Dead)	191
Epilogue: Beyond	221
<i>Notes</i>	229
<i>Bibliography</i>	243
<i>Index</i>	259

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Introduction: *Runa Puma*

*Ahi quanto a dir qual'era è cosa dura
esta selva selvaggia e aspra e forte . . .*

[Ah, it is hard to speak of what it was
that savage forest, dense and difficult . . .]

—Dante Alighieri, *The Divine Comedy, Inferno, Canto I* [trans. Mandelbaum]

Settling down to sleep under our hunting camp's thatch lean-to in the foothills of Sumaco Volcano, Juanicu warned me, "Sleep faceup! If a jaguar comes he'll see you can look back at him and he won't bother you. If you sleep facedown he'll think you're *aicha* [prey; lit., "meat" in Quichua] and he'll attack." If, Juanicu was saying, a jaguar sees you as a being capable of looking back—a self like himself, a *you*—he'll leave you alone. But if he should come to see you as prey—an *it*—you may well become dead meat.¹

How other kinds of beings see us matters. That other kinds of beings see us changes things. If jaguars also represent us—in ways that can matter vitally to us—then anthropology cannot limit itself just to exploring how people from different societies might happen to represent them as doing so. Such encounters with other kinds of beings force us to recognize the fact that seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs.

How would coming to terms with this realization change our understandings of society, culture, and indeed the sort of world that we inhabit? How does it change the methods, scope, practice, and stakes of anthropology? And, more important, how does it change our understanding of anthropology's object—the "human"—given that in that world beyond the human we sometimes find things we feel more comfortable attributing only to ourselves?

That jaguars represent the world does not mean that they necessarily do so as we do. And this too changes our understanding of the human. In that realm beyond the human, processes, such as representation, that we once thought we understood so well, that once seemed so familiar, suddenly begin to appear strange.

So as not to become meat we must return the jaguar's gaze. But in this encounter we do not remain unchanged. We become something new, a new kind of "we" perhaps, aligned somehow with that predator who regards us as a predator and not, fortunately, as dead meat. The forests around Juanicu's Quichua-speaking Runa village, Ávila, in Ecuador's Upper Amazon (a village that is a long day's hike from that makeshift shelter under which we, that night, were diligently sleeping faceup) are haunted by such encounters.¹ They are full of *runa puma*, shape-shifting human-jaguars, or were-jaguars as I will call them.

Runa in Quichua means "person"; *puma* means "predator" or "jaguar." These *runa puma*—beings who can see themselves being seen by jaguars as fellow predators, and who also sometimes see other humans the way jaguars do, namely, as prey—have been known to wander all the way down to the distant Napo River. The shamans in Río Blanco, a Runa settlement on the banks of the Upper Napo where I worked in the late 1980s, would see these were-jaguars in their *aya huasca*-induced visions.¹ "The *runa puma* that walk the forests around here," one shaman told me, "they're from Ávila." They described these massive *runa puma* as having white hides. The Ávila Runa, they insisted, become jaguars, white were-jaguars, *yura runa puma*.

Ávila enjoys a certain reputation in the Runa communities of the Upper Napo. "Be careful going up to Ávila," I was cautioned. "Be especially wary of their drinking parties. When you go out to pee you might come back to find that your hosts have become jaguars." In the early 1990s, in Tena, the capital of Napo Province, a friend and I went out drinking one night at a *cantina*, a makeshift tavern, with some of the leaders of FOIN, the provincial indigenous federation. Amid boasts of their own prowess—Who could command the most support from the base communities? Who could best bring in the big NGO checks?—talk turned more specifically to shamanic power and where the seat of such power, the font of FOIN's strength, really lay. Was it, as some that night held, Arajuno, south of the Napo? This is an area of Runa settlement that borders on the east and south with the Huaorani, a group that many Runa view with a mixture of fear, awe, and disdain as "savage" (*auca* in Quichua, hence their pejorative ethnonym *Auca*). Or was it Ávila, home to so many *runa puma*?

That night around the cantina table Ávila edged out Arajuno as a center of power. This village at first might seem an unlikely choice to signify shamanic power in the figure of a jaguar. Its inhabitants, as they would be the first to insist, are anything but "wild." They are, and, as they invariably make clear, have always been Runa—literally, "human persons"—which for them means that they have always been Christian and "civilized." One might even say that they are, in important but complicated ways (ways explored in the final chapter), "white." But they are, some of them, also equally—and really—puma.⁴

Ávila's position as a seat of shamanic power derives not just from its relation to some sort of sylvan savagery but also from its particular position in a long colonial history (see figure 1). Ávila was one of the earliest sites of Catholic indoctrination and Spanish colonization in the Upper Amazon. It was also the epicenter of a late-sixteenth-century regionally coordinated uprising against the Spaniards.

That rebellion against the Spaniards, a response in part to the increasingly onerous burden of tribute payment, was, according to colonial sources, sparked by the visions of two shamans. Beto, from the Archidona region, saw a cow who "spoke with him . . . and told him that the God of the Christians was very angry with the Spaniards who were in that land." Guami, from the Ávila region, was "transported out of this life for five days during which he saw magnificent things, and the God of the Christians sent him to kill everyone and burn their houses and crops" (de Ortiguera 1989 [1581–85]: 361).⁵ In the uprising that ensued the Indians around Ávila did, according to these sources, kill all the Spaniards (save one, about whom more in chapter 3), destroy their houses, and eradicate the orange and fig trees and all the other foreign crops from the land.

These contradictions—that Runa shamans receive messages from Christian gods and that the were-jaguars that wander the forests around Ávila are white—are part of what drew me to Ávila. The Ávila Runa are far removed from any image of a pristine or wild Amazon. Their world—their very being—is thoroughly informed by a long and layered colonial history. And today their village is just a few kilometers from the growing, bustling colonist town of Loreto and the expanding network of roads that connects this town with increasing efficiency to the rest of Ecuador. And yet they also live intimately with all kinds of real jaguars that walk the forests around Ávila; these include those that are white, those that are Runa, and those that are decidedly spotted.

This intimacy in large part involves eating and also the real risk of being eaten. A jaguar killed a child when I was in Ávila. (He was the son of the



FIGURE 1. As visible from the detail of the eighteenth-century map reproduced here (which corresponds very roughly to modern Ecuador's Andean and Amazonian regions), Ávila (upper center) was considered a missionary center (represented by a cross). It was connected by foot trails (dotted line) to other such centers, such as Archidona, as well as to the navigable Napo River (a tributary of the Amazon), and to Quito (upper left). The linear distance between Quito and Ávila is approximately 130 kilometers. The map indicates some of the historical legacies of colonial networks in which Ávila is immersed; the landscape of course has not remained unchanged. Loreto, the major colonist town, approximately 35 kilometers east of Ávila, is wholly absent from the map, though it figures prominently in the lives of the Ávila Runa and in this book. From Requena 1779 [1903]. Collection of the author.

woman posing with her daughter in the photograph that serves as the frontispiece for this chapter, a photograph the mother asked me to take so that she might have some memory of her daughter if she too were taken away.) And jaguars, as I discuss later in this book, also killed several dogs during my time in Ávila. They also shared their food with us. On several occasions we found half-eaten carcasses of agoutis and pacas that were jaguars had left for us in the forest as gifts and that subsequently became our meals. Felines of all kinds, including these generous meat-bearing runa puma, are sometimes hunted.

Eating also brings people in intimate relation to the many other kinds of nonhuman beings that make the forest their home. During the four years that I worked in Ávila villagers bought many things in Loreto. They bought things such as shotguns, ammunition, clothing, salt, many of the household items that would have been made by hand a couple of generations ago, and lots of the contraband cane liquor that they call *cachihua*. What they didn't buy was food. Almost all the food they shared with each other and with me came from their gardens, the nearby rivers and streams, and the forest. Getting food through hunting, fishing, gathering, gardening, and the management of a variety of ecological assemblages involves people intimately with one of the most complex ecosystems in the world—one that is chock-full of an astounding array of different kinds of interacting and mutually constituting beings. And it brings them into very close contact with the myriad creatures—and not just jaguars—that make their lives there. This involvement draws people into the lives of the forest. It also entangles the lives of that forest with worlds we might otherwise consider “all too human,” by which I mean the moral worlds we humans create, which permeate our lives and so deeply affect those of others.

Gods talking through the bodies of cows, Indians in the bodies of jaguars, jaguars in the clothing of whites, the *runa puma* enfolds these. What are we anthropologists—versed as we are in the ethnographic charting of the distinctive meaning-filled morally loaded worlds we humans create (distinctive worlds that make us feel that we are exceptions in this universe)—to make of this strange other-than-human and yet all-too-human creature? How should we approach this Amazonian Sphinx?

Making sense of this creature poses a challenge not unlike the one posed by that other Sphinx, the one Oedipus encountered on his way to Thebes. That Sphinx asked Oedipus, “What goes on four legs in the morning, on two legs at noon, and on three legs in the evening?” To survive this encounter Oedipus, like the members of our hunting party, had to figure out how to correctly respond. His answer to the riddle the Sphinx posed from her position somewhere (slightly) beyond the human was, “Man.” It is a response that, in light of the Sphinx's question, begs us to ask, What are we?

That other-than-human Sphinx whom, despite her inhumanity, we nevertheless regard and to whom we must respond, asks us to question what we think we know about the human. And her question reveals something about our answer. Asking what first goes on four, then on two, then on three legs simultaneously invokes the shared legacies of our four-pawed animality and

our distinctively bipedal peripatetic humanity, as well the various kinds of canes we fashion and incorporate to feel our ways through our finite lives—lives whose ends, as Kaja Silverman (2009) observes, ultimately connect us to all the other beings with whom we share the fact of finitude.

Footing for the unsteady, a guide for the blind, a cane mediates between a fragile mortal self and the world that spans beyond. In doing so it represents something of that world, in some way or another, to that self. Insofar as they serve to represent something of the world to someone, many entities exist that can function as canes for many kinds of selves. Not all these entities are artifacts. Nor are all these kinds of selves human. In fact, along with finitude, what we share with jaguars and other living selves—whether bacterial, floral, fungal, or animal—is the fact that how we represent the world around us is in some way or another constitutive of our being.

A cane also prompts us to ask with Gregory Bateson, “where” exactly, along its sturdy length, “do I start?” (Bateson 2000a: 465). And in thus highlighting representation’s contradictory nature—Self or world? Thing or thought? Human or not?—it indicates how pondering the Sphinx’s question might help us arrive at a more capacious understanding of Oedipus’s answer.

This book is an attempt to ponder the Sphinx’s riddle by attending ethnographically to a series of Amazonian other-than-human encounters. Attending to our relations with those beings that exist in some way beyond the human forces us to question our tidy answers about the human. The goal here is neither to do away with the human nor to reinscribe it but to open it. In rethinking the human we must also rethink the kind of anthropology that would be adequate to this task. Sociocultural anthropology in its various forms as it is practiced today takes those attributes that are distinctive to humans—language, culture, society, and history—and uses them to fashion the tools to understand humans. In this process the analytical object becomes isomorphic with the analytics. As a result we are not able to see the myriad ways in which people are connected to a broader world of life, or how this fundamental connection changes what it might mean to be human. And this is why expanding ethnography to reach beyond the human is so important. An ethnographic focus not just on humans or only on animals but also on how humans and animals relate breaks open the circular closure that otherwise confines us when we seek to understand the distinctively human by means of that which is distinctive to humans.

Creating an analytical framework that can include humans as well as non-humans has been a central concern of science and technology studies (see esp.

Latour 1993, 2005), the “multispecies” or animal turn (see esp. Haraway 2008; Mullin and Cassidy 2007; Choy et al. 2009; see also Kirksey and Helmreich 2010 for a review), and Deleuze-influenced (Deleuze and Guattari 1987) scholarship (e.g., Bennett 2010). Along with these approaches I share the fundamental belief that social science’s greatest contribution—the recognition and delimitation of a separate domain of socially constructed reality—is also its greatest curse. Along with these I also feel that finding ways to move beyond this problem is one of the most important challenges facing critical thought today. And I have especially been swayed by Donna Haraway’s conviction that there is something about our everyday engagements with other kinds of creatures that can open new kinds of possibilities for relating and understanding.

These “posthumanities” have been remarkably successful at focusing on the zone beyond the human as a space for critique and possibility. However, their productive conceptual engagement with this zone is hampered by certain assumptions, shared with anthropology and social theory more broadly, concerning the nature of representation. Furthermore, in attempting to address some of the difficulties these assumptions about representation create, they tend to arrive at reductionistic solutions that flatten important distinctions between humans and other kinds of beings, as well as those between selves and objects.

In *How Forests Think* I seek to contribute to these posthuman critiques of the ways in which we have treated humans as exceptional—and thus as fundamentally separate from the rest of the world—by developing a more robust analytic for understanding human relations to nonhuman beings. I do so by reflecting on what it might mean to say that forests think. I do so, that is, by working out the connection between representational processes (which form the basis for all thought) and living ones as this is revealed through ethnographic attention to that which lies beyond the human. I use the insights thus gained to rethink our assumptions about the nature of representation, and I then explore how this rethinking changes our anthropological concepts. I call this approach an “anthropology beyond the human.”⁴

In this endeavor I draw on the work of the nineteenth-century philosopher Charles Peirce (1931, 1992a, 1998a), especially his work in semiotics (the study of how signs represent things in the world). In particular I invoke what the Chicago-trained linguistic anthropologist Alejandro Paz calls the “weird” Peirce, by which he means those aspects of Peirce’s writing that we anthropologists find hard to digest—those parts that reach beyond the human to situate representation in the workings and logics of a broader nonhuman

universe out of which we humans come. I also draw greatly on Terrence Deacon's remarkably creative application of Peircean semiotics to biology and to questions of what he calls "emergence" (see Deacon 2006, 2012).

The first step toward understanding how forests think is to discard our received ideas about what it means to represent something. Contrary to our assumptions, representation is actually something more than conventional, linguistic, and symbolic. Inspired and emboldened by Frank Salomon's (2004) pioneering work on the representational logics of Andean knotted cords and Janis Nuckolls's (1996) work on Amazonian sound images, this is an ethnography that explores representational forms that go beyond language. But it does so by going beyond the human. Nonhuman life-forms also represent the world. This more expansive understanding of representation is hard to appreciate because our social theory—whether humanist or posthumanist, structuralist or poststructuralist—conflates representation with language.

We conflate representation with language in the sense that we tend to think of how representation works in terms of our assumptions about how human language works. Because linguistic representation is based on signs that are conventional, systemically related to one another, and "arbitrarily" related to their objects of reference, we tend to assume that all representational processes have these properties. But symbols, those kinds of signs that are based on convention (like the English word *dog*), which are distinctively human representational forms, and whose properties make human language possible, actually emerge from and relate to other modalities of representation. In Peirce's terminology these other modalities (in broad terms) are either "iconic" (involving signs that share likenesses with the things they represent) or "indexical" (involving signs that are in some way affected by or otherwise correlated with those things they represent). In addition to being symbolic creatures we humans share these other semiotic modalities with the rest of nonhuman biological life (Deacon 1997). These nonsymbolic representational modalities pervade the living world—human and nonhuman—and have underexplored properties that are quite distinct from those that make human language special.

Although there are anthropological approaches that do move beyond the symbolic to study the full range of Peircean signs, they locate such signs exclusively inside a human framework. Accordingly, those who use signs are understood to be human, and though signs may be extralinguistic (with the consequence that language can be treated as something more than symbolic) the contexts that make them meaningful are human sociocultural ones (see esp.

Silverstein 1995; Mannheim 1991; Keane 2003; Parmentier 1994; Daniel 1996; on "context," see Duranti and Goodwin 1992).

These approaches fail to recognize that signs also exist well beyond the human (a fact that changes how we should think about human semiosis as well). Life is constitutively semiotic. That is, life is, through and through, the product of sign processes (Bateson 2000c, 2002; Deacon 1997; Hoffmeyer 2008; Kull et al. 2009). What differentiates life from the inanimate physical world is that life-forms represent the world in some way or another, and these representations are intrinsic to their being. What we share with nonhuman living creatures, then, is not our embodiment, as certain strains of phenomenological approaches would hold, but the fact that we all live with and through signs. We all use signs as "canes" that represent parts of the world to us in some way or another. In doing so, signs make us what we are.

Understanding the relationship between distinctively human forms of representation and these other forms is key to finding a way to practice an anthropology that does not radically separate humans from nonhumans. Semiosis (the creation and interpretation of signs) permeates and constitutes the living world, and it is through our partially shared semiotic propensities that multi-species relations are possible, and also analytically comprehensible.

This way of understanding semiosis can help us move beyond a dualistic approach to anthropology, in which humans are portrayed as separate from the worlds they represent, toward a monistic one, in which how humans represent jaguars and how jaguars represent humans can be understood as integral, though not interchangeable, parts of a single, open-ended story. Given the challenges posed by learning to live with the proliferating array of other kinds of life-forms that increasingly surround us—be they pets, weeds, pests, commensals, new pathogens, "wild" animals, or technoscientific "mutants"—developing a precise way to analyze how the human is both distinct from and continuous with that which lies beyond it is both crucial and timely.

This search for a better way to attend to our relations to that which lies beyond the human, especially that part of the world beyond the human that is alive, forces us to make ontological claims—claims, that is, about the nature of reality. That, for example, jaguars in some way or other represent the world demands a general explanation that takes into account certain insights about the way the world is—insights that are garnered from attention to engagements with nonhumans and that are thus not fully circumscribed by any particular human system of understanding them.

As a recent debate makes clear (Venkatesan et al. 2010), ontology, as it circulates in our discipline, is a thorny term. On the one hand, it is often negatively associated with a search for ultimate truths—the kinds that the ethnographic documentation of so many different ways of doing and seeing is so good at debunking (Carrithers 2010: 157). On the other hand, it sometimes seems to function as nothing more than a trendy word for culture, especially when a possessive pronoun precedes it: *our* ontology, *say*, versus *theirs* (Holbraad 2010: 180).

In mobilizing Amazonian ethnography to think ontologically, I place myself in the company of two eminent anthropologists, Philippe Descola and Eduardo Viveiros de Castro, who have had a great and lasting influence on my research. Their work has gained traction in anthropology because of the ways it renders ontology plural without turning it into culture: different worlds instead of different worldviews (Candea 2010: 175). But the recognition of multiple realities only side steps the question: Can anthropology make general claims about the way the world is? Despite the many problems that making general claims raises—problems that our various forms of relativism struggle to keep at bay—I think anthropology can. And I think anthropology, to be true to the world, must find ways of making such claims, in part because, as I will argue, generality itself is a property of the world and not just something we humans impose on it. And yet, given our assumptions about representation, it seems difficult to make such claims. This book seeks to get beyond this impasse.

I do not, then, wish to enter the ontological from the direction of the human. My goal is not to isolate configurations of ontological propositions that crop up at a particular place or time (Descola 2005). I choose, rather, to enter at a more basic level. And I try to see what we can learn by lingering at that level. I ask, What kinds of insights about the nature of the world become apparent when we attend to certain engagements with parts of that world that reveal some of its different entities, dynamics, and properties?

In sum, an anthropology beyond the human is perforce an ontological one. That is, taking nonhumans seriously makes it impossible to confine our anthropological inquiries to an epistemological concern for how it is that humans, at some particular time or in some particular place, go about making sense of them. As an ontological endeavor this kind of anthropology places us in a special position to rethink the sorts of concepts we use and to develop new ones. In Marilyn Strathern's words, it aims "to create the conditions for new thoughts" (1988: 20).



FIGURE 2. Ávila circa 1992. Photo by author.

Such an endeavor might seem detached from the more mundane worlds of ethnographic experience that serve as the foundations for anthropological argumentation and insight. And yet this project, and the book that attempts to do it justice, is rigorously empirical in the sense that the questions it addresses grow out of many different kinds of experiential encounters that emerged over the course of a long immersion in the field. As I've attempted to cultivate these questions I've come to see them as articulations of general problems that become amplified, and thus made visible, through my struggles to pay ethnographic attention to how people in Ávila relate to different kinds of beings.

This anthropology beyond the human, then, grows out of an intense sustained engagement with a place and those who make their lives there. I have known Ávila, its environs, and the people who live there for a human generation; the infants I was introduced to on my first visit in 1992 were when I last visited in 2010 young parents; their parents are now grandparents, and some of the parents of those new grandparents are now dead (see figure 2). I spent four years (1996–2000) living in Ecuador and conducting fieldwork in Ávila and continue to visit regularly.

The experiential bases for this book are many. Some of the most important encounters with other kinds of beings came on my walks through the forest



FIGURE 3. Drinking beer. Photo by author.

with Runa hunters, others when I was left alone in the forest, sometimes for hours, as these hunters ran off in pursuit of their quarry—quarry that sometimes ended up circling back on me. Still others occurred during my slow strolls at dusk in the forest just beyond the manioc gardens that surround people's houses where I would be privy to the last burst of activity before so many of the forest's creatures settled down for the night.

I spent much of my time trying to listen, often with a tape recorder in hand, to how people in everyday contexts relate their experiences with different kinds of beings. These conversations often took place while drinking manioc beer with relatives and neighbors or while sipping *huayusa* tea around the hearth in the middle of the night (figure 3).⁴ The interlocutors here were usually human and usually Runa. But "conversation" also occasionally involved

other kinds of beings: the squirrel cuckoo who flew over the house whose call so radically changed the course of discussion down below; the household dogs with whom people sometimes need to make themselves understood; the woolly monkeys and the powerful spirits that inhabit the forest; and even the politicians who trudge up to the village during election season. With all of these, people in Ávila struggle to find channels of communication.

In my pursuit of certain tangibles of the ecological webs in which the Runa are immersed I also compiled many hundreds of ethnobiological specimens. These were identified by specialists, and they are now housed in Ecuador's main herbarium and museums of natural history.⁹ Making these collections very quickly gave me some sort of purchase on the forest and its many creatures. It also allowed an entry to people's understandings of ecological relations and gave me a way to articulate this with other bodies of knowledge about the forest world not necessarily bounded by that particular human context. Collecting imposes its own structures on forest relationships, and I was not unaware of the limitations—and motivations—of this search for stable knowledge, as well as the fact that, in some important respects, my efforts as a collector were quite different from Runa ways of engaging with the beings of the forest (see Kohn 2005).

I also sought to pay attention to forest experiences as they resonate through other arenas that are less grounded. Everyday life in Ávila is entangled with that second life of sleep and its dreams. Sleeping in Ávila is not the consolidated, solitary, sensorially deprived endeavor it has so often become for us. Sleep—surrounded by lots of people in open thatch houses with no electricity and largely exposed to the outdoors—is continuously interspersed with wakefulness. One awakens in the middle of the night to sit by the fire and ward off the chill, or to receive a gourd bowl full of steaming huayusa tea, or on hearing the common potoo call during a full moon, or sometimes even the distant hum of a jaguar. And one awakens also to the extemporaneous comments people make throughout the night about those voices they hear. Thanks to these continuous disruptions, dreams spill into wakefulness and wakefulness into dreams in a way that entangles both. Dreams—my own, those of my housemates, the strange ones we shared, and even those of their dogs—came to occupy a great deal of my ethnographic attention, especially because they so often involved the creatures and spirits that people the forest. Dreams too are part of the empirical, and they are a kind of real. They grow out of and work on the world, and learning to be attuned to their special logics and their fragile forms of efficacy helps reveal something about the world beyond the human.

The thinking in this book works itself through images. Some of these come in the form of dreams, but they also appear as examples, anecdotes, riddles, questions, conundrums, uncanny juxtapositions, and even photographs. Such images can work on us if we would let them. My goal here is to create the conditions necessary to make this sort of thinking possible.

This book is an attempt to encounter an encounter, to look back at these looking-backs, to face that which the Runa puma asks of us, and to formulate a response. That response is—to adopt a title from one of the books that Peirce never completed (Peirce 1992b)—my “guess at the riddle” that the Sphinx posed. It is my sense of what we can learn when we attend ethnographically to how the Sphinx’s question might reconfigure the human. Making claims about and beyond the human in anthropology is dangerous business; we are experts at undermining arguments through appeals to hidden contexts. This is the analytical trump card that every well-trained anthropologist has up her sleeve. In this sense, then, this is an unusual project, and it requires of you, the reader, a modicum of goodwill, patience, and the willingness to struggle to allow the work done here to work itself through you.

This book will not immediately plunge you into the messy entangled, “natural-cultural” worlds (Latour 1993) whose witnessing has come to be the hallmark of anthropological approaches to nonhumans. Rather, it seeks a gentler immersion in a kind of thinking that grows. It begins with very simple matters so that complexity, context, and entanglement can themselves become the objects of ethnographic analysis rather than the unquestioned conditions for it.

As such, the first chapters may seem far removed from an exposition of the complicated, historically situated, power-laden contexts that so deeply inform Runa ways of being—an exposition we justifiably expect from ethnography. But what I am trying to do here matters for politics; the tools that grow from attention to the ways the Runa relate to other kinds of beings can help think possibility and its realization differently. This, I hope, can speak to what Ghasan Hage (2012) calls an “alter-politics”—a politics that grows not from opposition to or critique of our current systems but one that grows from attention to another way of being, one here that involves other kinds of living beings.

This book, then, attempts to develop an analytic, which seeks to take anthropology “beyond the human” but without losing sight of the pressing ways in which we are also “all too human,” and how this too bears on living. The first step toward this endeavor, and the subject of the first chapter, “The

Open Whole," is to rethink human language and its relationship to those other forms of representation we share with nonhuman beings. Whether or not it is explicitly stated, language, and its unique properties, is what, according to so much of our social theory, defines us. Social or cultural systems, or even "actor-networks," are ultimately understood in terms of their languagelike properties. Like words, their "relata"—whether roles, ideas, or "actants"—do not precede the mutually constitutive relationships these have with one another in a system that necessarily comes to exhibit a certain circular closure by virtue of this fact.¹⁰

Given so much of social theory's emphasis on recognizing those unique sorts of languagelike phenomena responsible for such closure, I explore how, thanks to the ways in which language is nested within broader forms of representation that have their own distinctive properties, we are, in fact, open to the emerging worlds around us. In short, if culture is a "complex whole," to quote E. B. Tylor's (1871) foundational definition (a definition that invokes the ways in which cultural ideas and social facts are mutually constituted by virtue of the sociocultural systemic contexts that sustain them), then culture is also an "open whole." The first chapter, then, constitutes a sort of ethnography of signs beyond the human. It undertakes an ethnographic exploration of how humans and nonhumans use signs that are not necessarily symbolic—that is, signs that are not conventional—and demonstrates why these signs cannot be fully circumscribed by the symbolic.

Exploring how such aperture exists despite the very real fact of symbolic closure forces us to rethink our assumptions about a foundational anthropological concept: context. The goal is to defamiliarize the conventional sign by revealing how it is just one of several semiotic modalities and then to explore the very different nonsymbolic properties of those other semiotic forms that are usually occluded by and collapsed into the symbolic in anthropological analysis. An anthropology beyond the human is in large part about learning to appreciate how the human is also the product of that which lies beyond human contexts.

Those concerned with nonhumans have often tried to overcome the familiar Cartesian divide between the symbolic realm of human meanings and the meaningless realm of objects either by mixing the two—terms such as *natures-cultures* or *material-semiotic* are indicative of this—or by reducing one of these poles to the other. By contrast, "The Open Whole" aims to show that the recognition of representational processes as something unique to, and in a sense

even synonymous with, life allows us to situate distinctively human ways of being in the world as both emergent from and in continuity with a broader living semiotic realm.

If, as I argue, the symbolic is "open," to what exactly does it open? Opening the symbolic, through this exploration of signs beyond the symbolic, forces us to ponder what we might mean by the "real," given that the hitherto secure foundations for the real in anthropology—the "objective" and the contextually constructed—are destabilized by the strange and hidden logics of those signs that emerge, grow, and circulate in a world beyond the human.

Chapter 2, "The Living Thought," considers the implications of the claim, laid out in chapter 1, that all beings, including those that are nonhuman, are constitutively semiotic. All life is semiotic and all semiosis is alive. In important ways, then, life and thought are one and the same: life thinks; thoughts are alive.

This has implications for understanding who "we" are. Wherever there are "living thoughts" there is also a "self." "Self," at its most basic level, is a product of semiosis. It is the locus—however rudimentary and ephemeral—of a living dynamic by which signs come to represent the world around them to a "someone" who emerges as such as a result of this process. The world is thus "animate." "We" are not the only kind of *we*.

The world is also "enchanted." Thanks to this living semiotic dynamic, *mean-ing* (i.e., means-ends relations, significance, "aboutness," *telos*) is a constitutive feature of the world and not just something we humans impose on it. Appreciating life and thought in this manner changes our understanding of what selves are and how they emerge, dissolve, and also merge into new kinds of *we* as they interact with the other beings that make the tropical forest their home in that complex web of relations that I call an "ecology of selves."

The way Runa struggle to comprehend and enter this ecology of selves amplifies and makes apparent the peculiar logic of association by which living thoughts relate. If, as Strathern (1995) has argued, anthropology is at base about "the Relation," understanding some of the strange logics of association that emerge in this ecology of selves has important implications for our discipline. As we will see, it reveals how indistinction figures as a central aspect of relating. This changes our understandings of relationality; difference no longer sits so easily at the foundation of our conceptual framework, and this changes how we think about the central role that alterity plays in our discipline. A focus on this living semiotic dynamic in which indistinction (not to be confused with intrinsic similarity) operates also helps us see how "kinds" emerge

in the world beyond the human. Kinds are not just human mental categories, be these innate or conventional; they result from how beings relate to each other in an ecology of selves in ways that involve a sort of confusion.

Just how to go about relating to those different beings that inhabit this vast ecology of selves poses pragmatic as well as existential challenges. Chapters 3 and 4 examine ethnographically how the Runa deal with such challenges, and these chapters reflect, more generally, on what we can learn from this.

Chapter 3, "Soul Blindness," is about the general problem of how death is intrinsic to life. Hunting, fishing, and trapping place the Runa in a particular relationship with the many beings that make up the ecology of selves in which they live. These activities force the Runa to assume their points of view, and indeed to recognize that all these creatures that they hunt, as well as the many other creatures with which those hunted animals relate, have points of view. It forces them to recognize that these creatures inhabit a network of relations that is predicated in part on the fact that its constitutive members are living, thinking selves. The Runa enter this ecology of selves as selves. They hold that their ability to enter this web of relations—to be aware of and to relate to other selves—depends on the fact that they share this quality with the other beings that make up this ecology.

Being aware of the selfhood of the many beings that people the cosmos poses particular challenges. The Runa enter the forest's ecology of selves in order to hunt, which means that they recognize others as selves like themselves in order to turn them into nonselves. Objectification, then, is the flipside of animism, and it is not a straightforward process. Furthermore, one's ability to destroy other selves rests on and also highlights the fact that one is an ephemeral self—a self that can all too quickly cease being a self. Under the rubric "soul blindness," this chapter charts moments where this ability to recognize other selves is lost and how this results in a sort of monadic alienation as one is, as a consequence, avulsed from the relational ecology of selves that constitutes the cosmos.

That death is intrinsic to life exemplifies something Cora Diamond (2008) calls a "difficulty of reality." It is a fundamental contradiction that can overwhelm us with its incomprehensibility. And this difficulty, as she emphasizes, is compounded by another one: such contradictions are at times, and for some, completely unremarkable. The feeling of disjunction that this creates is also part of the difficulty of reality. Hunting in this vast ecology of selves in which one must stand as a self in relation to so many other kinds of selves who one

then tries to kill brings such difficulties to the fore; the entire cosmos reverberates with the contradictions intrinsic to life.

This chapter, then, is about the death in life, but it is especially about something Stanley Cavell calls the "little deaths" of "everyday life" (Cavell 2005: 128). There are many kinds and scales of death. There are many ways in which we cease being selves to ourselves and to each other. There are many ways of being pulled out of relation and many occasions where we turn a blind eye to and even kill relation. There are, in short, many modalities of disenchantment. At times the horror of this everyday fact of our existence bursts into our lives, and thus becomes a difficulty of reality. At others it is simply ignored.

Chapter 4, "Trans-Species Pidgins," is the second of these two chapters concerned with the challenges posed by living in relation to so many kinds of selves in this vast ecology of selves. It focuses on the problem of how to safely and successfully communicate with the many kinds of beings that people the cosmos. How to understand and be understood by beings whose grasp of human language is constantly in question is difficult in its own right. And when successful, communication with these beings can be destabilizing. Communication, to an extent, always involves communion. That is, communicating with others entails some measure of what Haraway (2008) calls "becoming with" these others. Although this promises to widen ways of being, it can also be very threatening to a more distinctly human sense of self that the Runa, despite this eagerness for expansion, also struggle to maintain. Accordingly, people in Ávila find creative strategies to open channels of communication with other beings in ways that also put brakes on these transgressive processes that can otherwise be so generative.

Much of this chapter focuses on the semiotic analysis of human attempts to understand and be understood by their dogs. For example, people in Ávila struggle to interpret their dogs' dreams, and they even give their dogs hallucinogens in order to be able to give them advice—in the process shifting to a sort of trans-species pidgin with unexpected properties.

The human-dog relation is special in part because of the way it links up to other relations. With and through their dogs people connect both to the broader forest ecology of selves and to an all-too-human social world that stretches beyond Ávila and its surrounding forests and that also catches up layers of colonial legacies. This chapter and the two that follow consider relationality in this expanded sense. They are concerned not just with how the Runa relate to the forest's living creatures but also with how the Runa relate to

its spirits as well as to the many powerful human beings who have left their traces on the landscape.

How the Runa relate to their dogs, to the living creatures of the forest, to its ethereal but real spirits, and to the various other figures—the estate bosses, the priests, the colonists—that over the course of time have come to people their world cannot be disentangled. They are all part of this ecology that makes the Runa who they are. Nonetheless, I resist the temptation to treat this relational knot as an irreducible complexity. There is something we can learn about all these relations—and relationality more broadly—by paying careful attention to the specific modalities through which communication is attempted with different kinds of beings. These struggles to communicate reveal certain formal properties of relation—a certain logic of association, a set of constraints—that are neither the contingent products of earthly biologies nor those of human histories but which are instantiated in, and thus give shape to, both.

The property that most interests me here is hierarchy. The life of signs is characterized by a host of unidirectional and nested logical properties—properties that are consummately hierarchical. And yet, in the hopeful politics we seek to cultivate, we privilege heterarchy over hierarchy, the rhizomatic over the arborescent, and we celebrate the fact that such horizontal processes—lateral gene transfer, symbiosis, commensalism, and the like—can be found in the nonhuman living world. I believe this is the wrong way to ground politics. Morality, like the symbolic, emerges within—not beyond—the human. Projecting our morality, which rightfully privileges equality, on a relational landscape composed in part of nested and unidirectional associations of a logical and ontological, but not a moral, nature is a form of anthropocentric narcissism that renders us blind to some of the properties of that world beyond the human. As a consequence it makes us incapable of harnessing them politically. Part of the interest of this chapter, then, lies in charting how such nested relations get caught up and deployed in moral worlds without themselves being the products of those moral worlds.

The fifth chapter, “Form’s Effortless Efficacy,” is the place where I flesh out this account—to which I have heretofore been alluding—of the anthropological significance of form. That is, it is about how specific configurations of limits on possibility emerge in this world, the peculiar manner in which these redundancies propagate, and the ways in which they come to matter to lives, human and otherwise, in the forests around Ávila.

Form is difficult to treat anthropologically. Neither mind nor mechanism, it doesn't easily fit the dualistic metaphysics we inherit from the Enlightenment—a metaphysics that even today, in ways we may not necessarily always notice, steers us toward seeing cause in terms either of mechanistic pushes and pulls or of the meanings, purposes, and desires that we have generally come to relegate to the realm of the human. Much of the book so far has been concerned with dismantling some of the more persistent legacies of this dualism by tracing the implications of recognizing that meaning, broadly defined, is part and parcel of the living world beyond the human. This chapter, by contrast, seeks to further this endeavor by going beyond not only the human but also life. It is about the strange properties of pattern propagation that exceed life despite the fact that such patterns are harnessed, nurtured, and amplified by life. In a tropical forest teeming with so many forms of life these patterns proliferate to an unprecedented degree. To engage with the forest on its terms, to enter its relational logic, to think with its thoughts, one must become attuned to these.

By "form" here, I'm not, then, referring to the conceptual structures—innate or learned—through which we humans apprehend the world, nor am I referring to an ideal Platonic realm. Rather, I am referring to a strange but nonetheless worldly process of pattern production and propagation, a process Deacon (2006, 2012) characterizes as "morphodynamic"—one whose peculiar generative logic necessarily comes to permeate living beings (human and nonhuman) as they harness it.

Even though form is not mind it is not thinglike either. Another difficulty for anthropology is that form lacks the tangible otherness of a standard ethnographic object. When one is inside it there is nothing against which to push; it cannot be defined by the way it resists. It is not amenable to this kind of palpation, to this way of knowing. It is also fragile and ephemeral. Like the vortices of the whirlpools that sometimes form in the swift-flowing Amazonian headwaters, it simply vanishes when the special geometry of constraints that sustains it disappears. It thus remains largely hidden from our standard modes of analysis.

Through the examination of a variety of ethnographic, historical, and biological examples summoned together in an attempt to make sense of a puzzling dream I had about my relation to some of the animals of the forest and the spirit masters that control them, this chapter tries to understand some of the peculiar properties of form. It tries to understand the ways form does

something to cause-and-effect temporality and the ways it comes to exhibit its own kind of “effortless efficacy” as it propagates itself through us. I am particularly interested here in how the logic of form affects the logic of living thoughts. What happens to thought when it is freed from its own intentions, when, in Lévi-Strauss’s words, we ask of it no return (Lévi-Strauss 1966: 219)? What kinds of ecologies does it sound, and, in the process, what new kinds of relations does it make possible?

This chapter is also, nonetheless, concerned with the very practical problem of getting inside form and doing something with it. The wealth of the forest—be it game or extractive commodities—accumulates in a patterned way. Accessing it requires finding ways to enter the logic of these patterns. Accordingly, this chapter also charts the various techniques, shamanic and otherwise, used to do this, and it also attends to the painful sense of alienation the Runa feel when they are unable to enter the many new forms that have come over time to serve as the reservoirs for so much power and wealth.

Rethinking cause through form forces us to rethink agency as well. What is this strange way of getting something done without doing anything at all? What kinds of politics can come into being through this particular way of creating associations? Grasping how form emerges and propagates in the forest and in the lives of those who relate to it—be they river dolphins, hunters, or rubber bosses—and understanding something about form’s effortless efficacy is central to developing an anthropology that can attend to those many processes central to life, human and nonhuman, which are not built from quanta of difference.

How Forests Think is a book, ultimately, about thought. It is, to quote Viveiros de Castro, a call to make anthropology a practice for “la décolonisation permanente de la pensée” (Viveiros de Castro 2009: 4). My argument is that we are colonized by certain ways of thinking about relationality. We can only imagine the ways in which selves and thoughts might form associations through our assumptions about the forms of associations that structure human language. And then, in ways that often go unnoticed, we project these assumptions onto nonhumans. Without realizing it we attribute to nonhumans properties that are our own, and then, to compound this, we narcissistically ask them to provide us with corrective reflections of ourselves.

So, how should we think with forests? How should we allow the thoughts in and of the nonhuman world to liberate our thinking? Forests are good to think because they themselves think. Forests think. I want to take this seriously, and

I want to ask, What are the implications of this claim for our understandings of what it means to be human in a world that extends beyond us?

Wait. How can I even make this claim that forests think? Shouldn't we only ask how people think forests think? I'm not doing this. Here, instead, is my provocation. I want to show that the fact that we can make the claim that forests think is in a strange way a product of the fact that forests think. These two things—the claim itself and the claim that we can make the claim—are related: It is because thought extends beyond the human that we can think beyond the human.

This book, then, aims to free our thinking of that excess conceptual baggage that has accumulated as a result of our exclusive attention—to the neglect of everything else—to that which makes us humans exceptional. *How Forests Think* develops a method for crafting new conceptual tools out of the unexpected properties of the world beyond the human that we discover ethnographically. And in so doing it seeks to liberate us from our own mental enclosures. As we learn to attend ethnographically to that which lies beyond the human, certain strange phenomena suddenly come to the fore, and these strange phenomena amplify, and in the process come to exemplify, some of the general properties of the world in which we live. If through this form of analysis we can find ways to further amplify these phenomena, we can then cultivate them as concepts and mobilize them as tools. By methodologically privileging amplification over, say, comparison or reduction we can create a somewhat different anthropology, one that can help us understand how we might better live in a world we share with other kinds of lives.

The logics of living dynamics, and the sorts of ancillary phenomena these both create and catch up, might at first appear strange and counterintuitive. But, as I hope to show, they also permeate our everyday lives, and they might help us understand our lives differently if we could just learn to listen for them. This emphasis on defamiliarization—coming to see the strange as familiar so that the familiar appears strange—calls to mind a long anthropological tradition that focuses on how an appreciation for context (historical, social, cultural) destabilizes what we take to be natural and immutable modes of being. And yet, when compared to the distance-making practices associated with more traditional liberatory ethnographic or genealogical exercises, seeing the human from somewhat beyond the human does not merely destabilize the taken for granted; it changes the very terms of analysis and comparison.

This reach beyond the human changes our understanding of foundational analytical concepts such as context but also others, such as representation,

relation, self, ends, difference, similarity, life, the real, mind, person, thought, form, finitude, future, history, cause, agency, relation, hierarchy, and generality. It changes what we mean by these terms and where we locate the phenomena to which they refer, as well as our understanding of the effects such phenomena have in the living world in which we live.

The final chapter, "The Living Future (and the Imponderable Weight of the Dead)," builds on this way of thinking with forests that I develop in this book as it takes as its focus another enigmatic dream, in this case one of a hunter who is not sure if he is the rapacious predator (who appears here as a white policeman) or the helpless prey of his oneiric prophecy. The interpretive dilemma that this dream poses, and the existential and psychic conflict that it thus lays bare, concerns how to continue as a self and what such continuity might mean in the ecology of selves in which the Runa live—an ecology that is firmly rooted in a forest realm that reaches well beyond the human but which also catches up in its tendrils the detritus of so many all-too-human pasts. This chapter, more broadly, is about survival. That is, it is about the relation of continuity and growth to absence. Ethnographic attention to the problem of survival in the particular colonially inflected ecology of selves in which the Runa live tells us something more general about how we might become new kinds of *we*, in relation to such absences, and how, in this process, "we" might, to use Haraway's (2008) term, "flourish."

Understanding this dream and what it can tell us about survival calls for a shift, not only regarding anthropology's object—the human—but also regarding its temporal focus. It asks us to recognize more generally how life—human and nonhuman—is not just the product of the weight of the past on the present but how it is also the product of the curious and convoluted ways in which the future comes to bear upon a present.

That is, all semiotic processes are organized around the fact that signs represent a future possible state of affairs. The future matters to living thoughts. It is a constitutive feature of any kind of self. The life of signs is not, then, just in the present but also in a vague and possible future. Signs are oriented toward the ways in which future signs will likely represent their relationship to a likely state of affairs. Selves, then, are characterized by what Peirce calls a "being *in futuro*" (CP 2.86), or a "living future" (CP 8.194).¹¹ This particular kind of causality, whereby a future comes to affect the present via the mediation of signs, is unique to life.

In the life of signs future is also closely related to absence. All kinds of signs in some way or other re-present what is not present. And every successful

representation has another absence at its foundation; it is the product of the history of all the other sign processes that less accurately represented what would be. What one is as a semiotic self, then, is constitutively related to what one is not. One's future emerges from and in relation to a specific geometry of absent histories. Living futures are always "indebted" to the dead that surround them.

At some level this way in which life creates future in negative but constitutive relation to all its pasts is characteristic of all semiotic processes. But it is a dynamic that is amplified in the tropical forest, with its unprecedented layers of mutually constitutive representational relationships. Runa engagements with this complex ecology of selves create even more future.

Chapter 6, then, is primarily concerned with one particular manifestation of this future: the realm of the afterlife located deep in the forest and inhabited by the dead and the spirit masters that control the forest's animals. This realm is the product of the relationship that invisible futures have to the painful histories of the dead that make life possible. Around Ávila these dead take the form of were-jaguars, masters, demons, and the specters of so many pre-Hispanic, colonial, and republican pasts; all these continue, in their own ways, to haunt the living forest.

This chapter traces how this ethereal future realm relates to the concrete one of everyday Runa existence. The Runa, living in relation to the forest's vast ecology of selves, also live their lives with one foot *in futuro*. That is, they live their lives with one foot in the spirit realm that is the emergent product of the ways in which they engage with the futures and the pasts that the forest comes to harbor in its relational webs. This other kind of "beyond," this *after-life*, this *super-nature*, is not exactly natural (or cultural), but it is nonetheless real. It is its own kind of irreducible real, with its own distinctive properties and its own tangible effects in a future present.

The fractured and yet necessary relationship between the mundane present and the vague future plays out in specific and painful ways in what Lisa Stevenson (2012; see also Butler 1997) might call the psychic life of the Runa self, immersed and informed as it is by the ecology of selves in which it lives. The Runa are both of and alienated from the spirit world, and survival requires cultivating ways to allow something of one's future self—living tenuously in the spirit realm of the forest masters—to look back on and call out to that more mundane part of oneself that might then hopefully respond. This ethereal realm of continuity and possibility is the emergent product of a whole

host of trans-species and transhistorical relations. It is the product of the imponderable weight of the many dead that make a living future possible.

That hunter's challenge of surviving as an *I*, as it was revealed in his dream and as it plays out in this ecology of selves, depends on how he is hailed by others—others that may be human or nonhuman, *fleshly* or virtual. It also depends on how he responds. Is he the white policeman who might turn on his Runa neighbors with a blood thirst that terrifies him? Is he helpless prey? Or might he not be a runa puma, a were-jaguar, capable, even, of returning a jaguar's gaze?

Let this runa puma, this one who both is and is not us, be, like Dante's Virgil, our guide as we wander this "dense and difficult" forest—this "selva selvaggia" where words so often fail us. Let this runa puma guide us with the hope that we too may learn another way to attend and respond to the many lives of those selves that people this sylvatic realm.



The Open Whole

By a feeling I mean an instance of that sort of element of consciousness which is all that it is positively, in itself, regardless of anything else. . . . [A.] feeling is absolutely simple and without parts—as it evidently is, since it is whatever it is regardless of anything else, and therefore regardless of any part, which would be something other than the whole.

— Charles Peirce, *The Collected Papers* 1:306–10

One evening while the grown-ups gathered around the hearth drinking manioc beer, Maxi, settling back to a quieter corner of the house, began to tell his teenage neighbor Luis and me about some of his recent adventures and mishaps. Fifteen or so and just beginning to hunt on his own, he told us of the day he stood out in the forest for what seemed an eternity, waiting for something to happen, and how, all of a sudden, he found himself close to a herd of collared peccaries moving through the underbrush. Frightened, he hoisted himself into the safety of a little tree and from there fired on and hit one of the pigs. The wounded animal ran off toward a little river and . . . “*tsupu*.”

Tsupu. I’ve deliberately left Maxi’s utterance untranslated. What might it mean? What does it sound like?

Tsupu, or *tsupuuu*^h, as it is sometimes pronounced, with the final vowel dragged out and aspirated, refers to an entity as it makes contact with and then penetrates a body of water; think of a big stone heaved into a pond or the compact mass of a wounded peccary plunging into a river’s pool. *Tsupu* probably did not immediately conjure such an image (unless you speak lowland Ecuadorian Quichua). But what did you feel upon learning what it describes? Once I tell people what *tsupu* means, they often experience a sudden feel for its meaning: “Oh, of course, *tsupu!*”

By contrast, I would venture that even after learning that the greeting “*causanguichu*,” used when encountering someone who hasn’t been seen in a long time, means “Are you still alive?” you don’t have such a feeling. *Causanguichu* certainly feels like what it means to native speakers of Quichua, and over the years I too have come to develop a feel for its meaning. But what is it about *tsupu* that causes its meaning to feel so evident even for many people who don’t speak Quichua? *Tsupu* somehow feels like a pig plunging into water.

How is it that *tsupu* means? We know that a word like *causanguichu* means by virtue of the ways in which it is inextricably embedded, through a dense historically contingent tangle of grammatical and syntactic relations, with other such words in that uniquely human system of communication we call language. And we know that what it means also depends on the ways in which language is itself caught up in broader social, cultural, and political contexts, which share similar historically contingent systemic properties. In order to develop a feel for *causanguichu* we have to grasp something of the totality of the interrelated network of words in which it exists. We also need to grasp something of the broader social context in which it is and has been used. Making sense of how we live inside these kinds of changing contexts that we both make and that make us has long been an important goal of anthropology. For anthropology the “human,” as a being and an object of knowledge, emerges only by attending to how we are embedded in these uniquely human contexts—these “complex wholes” as E. B. Tylor’s (1871) classic definition of culture terms them.

But if *causanguichu* is firmly in language, *tsupu* seems somehow outside it. *Tsupu* is a sort of paralinguistic parasite on the language that somewhat indifferently bears it. *Tsupu* is, in a way, as Peirce might say, “all that it is positively, in itself, regardless of anything else.” And this admittedly minor fact, that this strange little quasi-word is not quite made by its linguistic context, troubles the anthropological project of making sense of the human via context.

Take *causanguichu*’s root, the lexeme *causa-*, which is marked for person and inflected by a suffix that signals its status as a question:

causa-ngui-chu
live-3-INTER?
Are you still alive?

Through its grammatical inflections *causanguichu* is inextricably related to the other words that make up the Quichua language. *Tsupu*, by contrast, doesn’t

really interact with other words and therefore can't be modified to reflect any such possible relations. Being "all that it is positively in itself," it can't even be grammatically negated. What kind of thing, then, is *tsupu*? Is it even a word? What does its anomalous place in language reveal about language? And what can it tell us about the anthropological project of grasping the various ways in which linguistic as well as sociocultural and historical contexts form the conditions of possibility both for human life and for our ways of attending to it?

Although not exactly a word, *tsupu* certainly is a sign. That is, it certainly is, as the philosopher Charles Peirce put it, "something which stands to somebody for something in some respect or capacity" (CP 2.228). This is quite different from Saussure's (1959) more humanist treatment of signs with which we anthropologists tend to be more familiar. For Saussure human language is the paragon and model for all sign systems (1959: 68). Peirce's definition of a sign, by contrast, is much more agnostic about what signs are and what kinds of beings use them; for him not all signs have languagelike properties, and, as I discuss below, not all the beings who use them are human. This broader definition of the sign helps us become attuned to the life signs have beyond the human as we know it.

Tsupu captures to some extent and in some particular way something of a pig plunging into water, and it does so—weirdly—not just for Quichua speakers, but to some degree for those of us who may not have any familiarity with the language that carries it along.⁷ What might paying attention to this not-quite-wordlike-kind-of-sign reveal? Feeling *tsupu*, "in itself, regardless of anything else," can tell us something important about the nature of language and its unexpected openings toward the world "itself." And insofar as it can help us understand how signs are not just bounded by human contexts, but how they also reach beyond them. Insofar, that is, as it can help reveal how signs are also in, of, and about other sensuous worlds that we too can feel, it can also tell us something about how we can move beyond understanding the human in terms of the "complex wholes" that make us who we are. In sum, appreciating what it might mean "to live" (Quichua *causa-ngapa*) in worlds that are open to that which extends beyond the human might just allow us to become a little more "worldly."⁸

IN AND OF THE WORLD

In uttering "tsupu," Maxi brought home something that happened in the forest. Insofar as Luis, or I, or you, feel *tsupu* we come to grasp something of Maxi's

experience of being near a wounded pig plunging into a pool of water. And we can come to have this feeling even if we weren't in the forest that day. All signs, and not just *tsupu*, are in some way or another about the world in this sense. They "re-present." They are about something not immediately present.

But they are also all, in some way or another, in and of the world. When we think of situations in which we use signs to represent an event, such as the one I've just described, this quality may be hard to see. Sitting back in a dark corner of a thatched roof house listening to Maxi talk about the forest is not the same as having been present to that pig plunging into water. Isn't this "radical discontinuity" with the world another important hallmark of signs?⁴ Insofar as signs do not provide any sort of immediate, absolute, or certain purchase on the entities they represent, it certainly is. But the fact that signs always mediate does not mean that they also necessarily exist in some separate domain inside (human) minds and cut off from the entities they stand for. As I will show, they are not just about the world. They are also in important ways in it.

Consider the following. Toward the end of a day spent walking in the forest, Hilario, his son Lucio, and I came upon a troop of woolly monkeys moving through the canopy. Lucio shot and killed one, and the rest of the troop dispersed. One young monkey, however, became separated from the troop. Finding herself alone she hid in the branches of an enormous red-trunked tree that poked out of the forest canopy high above.⁵

In the hope of startling the monkey into moving to a more visible perch so that his son could shoot it Hilario decided to fell a nearby palm tree:

look out!
ta ta
 I'll make it go *pu oh*
 watch out!⁶

Ta ta and *pu oh*, like *tsupu*, are images that sound like what they mean. *Ta ta* is an image of chopping: tap tap. *Pu oh* captures the process by which a tree falls. The snap that initiates its toppling, the swish of the crown free-falling through layers of forest canopy, and the crash and its echoes as it hits the ground are all enfolded in this sonic image.

Hilario then went and did what he said. He walked off a little way and with his machete began chopping rhythmically at a palm tree. The tapping of steel against trunk is clearly audible on the recording I made in the forest that afternoon (*ta ta ta ta . . .*)—as was the palm crashing down (*pu oh*).

Lowland Quichua has hundreds of "words" like *ta ta*, *pu ob*, and *tsupu* that mean by virtue of the ways in which they sonically convey an image of how an action unfolds in the world. They are ubiquitous in speech, especially in forest talk. A testament to their importance to Runa ways of being in the world is that the linguistic anthropologist Janis Nuckolls (1996) has written an entire book—titled, appropriately, *Sounds Like Life*—about them.

A "word" such as *tsupu* is like the entity it represents thanks to the ways in which the differences between the "sign vehicle" (i.e., the entity that is taken as a sign, in this case the sonic quality of *tsupu*)⁷ and the object (in this case the plunging-into-water that this "word" simulates) are ignored.⁸ Peirce called these kinds of signs of likeness "icons." They conform to the first of his three broad classes of signs.

As Hilario had anticipated, the sound of the palm tree crashing frightened the monkey from her perch. This event itself, and not just its before-the-fact imitation, can also be taken as a kind of sign. It is a sign in the sense that it too came to be "something which stands to somebody for something in some respect or capacity." In this case the "somebody" to whom this sign stands is not human. The palm crashing down stands for something to the monkey. Significance is not the exclusive province of humans because we are not the only ones who interpret signs. That other kinds of beings use signs is one example of the ways in which representation exists in the world beyond human minds and human systems of meaning.

The palm crashing down becomes significant in a way that differs from its imitation *pu ob*.⁹ *Pu ob* is iconic in the sense that it, in itself, is in some respect like its object. That is, it functions as an image when we fail to notice the differences between it and the event that it represents. It means due to a certain kind of absence of attention to difference. By ignoring the myriad characteristics that make any entity unique, a very restricted set of characteristics is amplified, here by virtue of the fact that the sound that simulates the action also happens to share these characteristics.

The crashing palm itself comes to signify something for the monkey in another capacity. The crash, as sign, is not a likeness of the object it represents. Instead, it points to something else. Peirce calls this sort of sign an "index." Indices constitute his second broad class of signs.

Before exploring indices further, I want to briefly introduce the "symbol"—Peirce's third kind of sign. Unlike iconic and indexical modes of reference, which form the bases for all representation in the living world, symbolic

reference is, on this planet at least, a form of representation that is unique to humans. Accordingly, as anthropologists of the human we are most familiar with its distinctive properties. Symbols refer, not simply through the similarity of icons, or solely through the pointing of indices. Rather, as with the word *causanguichu*, they refer to their object indirectly by virtue of the ways in which they relate systemically to other such symbols. Symbols involve convention. This is why *causanguichu* only means—and comes to feel meaningful—by virtue of the established system of relationships it has with other words in Quichua.

The palm that Hilario sent crashing down that afternoon startled the monkey. As an index it forced her to notice that something just happened, even though what just happened remained unclear.¹⁰ Whereas icons involve not noticing, indices focus the attention. If icons are what they are “in themselves” regardless of the existence of the entity they represent, indices involve facts “themselves.” Whether or not someone was there to hear it, whether or not the monkey, or anyone else for that matter, took this occurrence to be significant, the palm, itself, still came crashing down.

Unlike icons, which represent by virtue of the resemblances they share with objects, indices represent “by virtue of real connections to them” (Peirce 1998c: 461; see also CP 2.248). Tugging on the stems of woody vines, or lianas, that extend up into the canopy is another strategy to scare monkeys out of their hidden perches (see frontispiece, this chapter). To the extent that such an action can startle a monkey it is because of a chain of “real connections” among disparate things: the hunter’s tug is transmitted, via the liana, high up to the tangled mar of epiphytes, lianas, moss, and detritus that accumulates to form the perch atop which the hiding monkey sits.

Although one might say that the hunter’s tug, propagated through the liana and mat, literally shakes the monkey out of her sense of security, how this monkey comes to take this tug as a sign cannot be reduced to a deterministic chain of causes and effects. The monkey need not necessarily perceive the shaking perch to be a sign of anything. And in the event that she does, her reaction will be something other than the effect of the force of the tug propagated up the length of the liana.

Indices involve something more than mechanical efficiency. That something more is, paradoxically, something less. It is an absence. That is, to the extent that indices are noticed they impel their interpreters to make connections between some event and another potential one that has not yet occurred.

A monkey takes the moving perch, as sign, to be connected to something else, for which it stands. It is connected to something dangerously different from her present sense of security. Maybe the branch she is perched on is going to break off. Maybe a jaguar is climbing up the tree . . . Something is about to happen, and she had better do something about it. Indices provide information about such absent futures. They encourage us to make a connection between what is happening and what might potentially happen.

LIVING SIGNS

Asking whether signs involve sound images like *tsupu*, or whether they come to mean through events like a palm crashing down, or whether their sense emerges in some more systemic and distributed manner, like the interrelated network of words printed on the pages that make up this book, might encourage us to think about signs in terms of the differences in their tangible qualities. But signs are more than things. They don't squarely reside in sounds, events, or words. Nor are they exactly in bodies or even minds. They can't be precisely located in this way because they are ongoing relational processes. Their sensuous qualities are only one part of the dynamic through which they come to be, to grow, and to have effects in the world.

In other words signs are alive. A crashing palm tree—taken as sign—is alive insofar as it can grow. It is alive insofar as it will come to be interpreted by a subsequent sign in a semiotic chain that extends into the possible future.

The startled monkey's jump to a higher perch is a part of this living semiotic chain. It is what Peirce called an "interpretant," a new sign that interprets the way in which a prior sign relates to its object.¹¹ Interpretants can be further specified through an ongoing process of sign production and interpretation that increasingly captures something about the world and increasingly orients an interpreting self toward this aboutness. Semiosis is the name for this living sign process through which one thought gives rise to another, which in turn gives rise to another, and so on, into the potential future.¹² It captures the way in which living signs are not just in the here and now but also in the realm of the possible.

Although semiosis is something more than mechanical efficiency, thinking is not just confined to some separate realm of ideas.¹³ A sign has an effect, and this, precisely, is what an interpretant is. It is the "proper significate effect that the sign produces" (CP 5.475). The monkey's jump, sparked by her reaction to

a crashing palm, amounts to an interpretant of a prior sign of danger. It makes visible an energetic component that is characteristic of all sign processes, even those that might seem purely "mental."¹⁴ Although semiosis is something more than energetics and materiality, all sign processes eventually "do things" in the world, and this is an important part of what makes them alive.¹⁵

Signs don't come from the mind. Rather, it is the other way around. What we call mind, or self, is a product of semiosis. That "somebody," human or non-human, who takes the crashing palm to be significant is a "self that is just coming into life in the flow of time" (CP 5.421) by virtue of the ways in which she comes to be a locus—however ephemeral—for the "interpretance" of this sign and many others like it. In fact, Peirce coined the cumbersome term *interpretant* to avoid the "homunculus fallacy" (see Deacon 2012: 48) of seeing a self as a sort of black box (a little person inside us, a homunculus) who would be the interpreter of those signs but not herself the product of those signs. Selves, human or nonhuman, simple or complex, are outcomes of semiosis as well as the starting points for new sign interpretation whose outcome will be a future self. They are waypoints in a semiotic process.

These selves, "just coming into life," are not shut off from the world; the semiosis occurring "inside" the mind is not intrinsically different from that which occurs among minds. That palm crashing down in the forest illustrates this living worldly semiosis as it is embedded in an ecology of disparate emerging selves. Hilario's iconic simulation of a falling palm charts a possible future that then becomes realized in a palm that he actually fells. Its crash, in turn, is interpreted by another being whose life will change thanks to the way she takes this as a sign of something upon which she must act. What emerges is a highly mediated but nevertheless unbroken chain that jumps from the realm of human speech to that of human bodies and their actions, and from these to events-in-the-world such as a tree crashing down that these realized embodied intentions actualize, and from here to the equally physical reaction that the semiotic interpretation of this event provokes in another kind of primate high up in a tree. The crashing palm and the human who felled it came to affect the monkey, notwithstanding their physical separation from her. Signs have worldly effects even though they are not reducible to physical cause-and-effect.

Such tropical trans-species attempts at communication reveal the living worldly nature of semiosis. All semiosis (and by extension thought) takes place in minds-in-the-world. To highlight this characteristic of semiosis this is how

Peirce described the thought practices of Antoine Lavoisier, the eighteenth-century French aristocrat and founder of the modern field of chemistry:

Lavoisier's method was . . . to dream that some long and complicated chemical process would have a certain effect, to put it into practice with dull patience, after its inevitable failure, to dream that with some modification it would have another result, and to end by publishing the last dream as a fact: his way was to carry his mind into his laboratory, and literally to make of his alembics and cucurbits instruments of thought, giving a new conception of reasoning as something which was to be done with one's eyes open, in manipulating real things instead of words and fancies. (CP 5,363)

Where would we locate Lavoisier's thoughts and dreams? Where, if not in this emerging world of blown glass cucurbits and alembics and the mixtures contained in their carefully delimited spaces of absence and possibility, is his mind, and future self, coming in to being?

ABSENCES

Lavoisier's blown glass flasks point to another important element of semiosis. Like these curiously shaped receptacles, signs surely have an important materiality: they possess sensuous qualities; they are instantiated with respect to the bodies that produce and are produced by them; and they can make a difference in the worlds that they are about. And yet, like the space delimited by the walls of the flask, signs are also in important ways immaterial. A glass flask is as much about what it is as it is about what it is not; it is as much about the vessel blown into form by the glassmaker—and all the material qualities and technological, political, and socioeconomic histories that made that act of creation possible—as it is about the specific geometry of absence that it comes to delimit. Certain kinds of reactions can take place in that flask because of all the others that are excluded from it.

This kind of absence is central to the semiosis that sustains and instantiates life and mind. It is apparent in what played out in the forest that afternoon as we were out hunting monkeys. Now that that young woolly monkey had moved to a more exposed perch Lucio tried to shoot at it with his muzzle-loading black powder shotgun. But when he pulled the trigger the hammer simply clicked down on the firing cap. Lucio quickly replaced the defective cap and reloaded—this time packing the barrel with an extra dose of lead shot. When the monkey climbed to an even more exposed position, Hilario encouraged his



FIGURE 4. A muzzle-loading shotgun (*illapa*). Photo by author.

son to fire again: "Hurry, now really!" Wary of the precarious nature of his firearm, however, Lucio first uttered, "teeyee."

Teeyee, like *tupu*, *ta ta*, and *pu oh*, is an image in sound. It is iconic of a gun successfully firing and hitting its target. The mouth that pronounces it is like a flask that assumes the various shapes of a firing gun. First the tongue taps on the palette to produce the stopped consonant the way a hammer strikes a firing cap. Then the mouth opens ever wider as it pronounces the expanding elongated vowel, the way lead shot, propelled by the explosion of powder ignited by the cap, sprays out of the barrel (figure 4).

Moments later Lucio pulled the trigger. And this time, with a deafening *teeyee*, the gun fired.

Teeyee is, at many levels, a product of what it is not. The shape of the mouth effectively eliminates all the many other sounds that could have been made as breath is voiced. What is left is a sound that "fits" the object it represents thanks to the many sounds that are absent. The object that is not physically present constitutes a second absence. Finally, *teeyee* involves another absence in the sense that it is a representation of a future brought into the present in the hopes that this not-yet will affect the present. Lucio hopes his gun will successfully fire *teeyee* when he pulls the trigger. He imported this simulation into

the present from the possible world that he hopes will come to be. This future-possible, which orients Lucio toward taking all the steps needed to make this future possible, is also a constitutive absence. What *teeyee* is—its significate effect, in short, its meaning—is dependent on all these things that it is not.

All signs, and not just those we might call magical, traffic in the future in the way that *teeyee* does. They are calls to act in the present through an absent but re-presented future that, by virtue of this call, can then come to affect the present; “Hurry, now really,” as Hilario implored his son moments before he fired his gun, involves a prediction that there will still be an “it” up there to shoot. It is a call from the future as re-presented in the present.

Drawing inspiration from the ancient Chinese philosopher Lao-tzu and his reflection on how the hole at the hub is what makes a wheel useful, Terrence Deacon (2006) refers to the special kind of nothingness delimited by the spokes of a wheel, or by the glass of a flask, or by the shape of the mouth when uttering “*teeyee*” as a “constitutive absence.” Constitutive absence, according to Deacon, is not just found in the world of artifacts or humans. It is a kind of relation to that which is spatially or temporally not present that is crucial to biology and to any kind of self (see Deacon 2012: 3). It points to the peculiar way in which, “in the world of mind, nothing—that which is *not*—can be a cause” (Bateson 2000a: 458, quoted in Deacon 2006).

As I discuss later in this chapter, and in subsequent ones as well, constitutive absence is central to evolutionary processes. That, for example, a lineage of organisms comes to increasingly fit a particular environment is the result of the “absence” of all the other lineages that were selected out. And all manner of sign processes, not just those associated directly with biological life, come to mean by virtue of an absence: iconicity is the product of what is not noticed; indexicality involves a prediction of what is not yet present; and symbolic reference, through a convoluted process that also involves iconicity and indexicality, points to and images absent worlds by virtue of the ways in which it is embedded in a symbolic system that constitutes the absent context for the meaning of any given word’s utterance. In the “world of mind,” constitutive absence is a particular mediated way in which an absent future comes to affect the present. This is why it is appropriate to consider *telos*—that future for the sake of which something in the present exists—as a real causal modality wherever there is life (see Deacon 2013).

The constant play between presence and these different kinds of absences gives signs their life. It makes them more than the effect of that which came

before them. It makes them images and intimations of something potentially possible.

PROVINCIALIZING LANGUAGE

Considering crashing palms, jumping monkeys, and "words" like *tsupu* helps us see that representation is something both more general and more widely distributed than human language. It also helps us see that these other modes of representation have properties that are quite different from those exhibited by the symbolic modalities on which language depends. In short, considering those kinds of signs that emerge and circulate beyond the symbolic helps us see that we need to "provincialize" language.

My call to provincialize language alludes to Dipesh Chakrabarty's *Provincializing Europe* (2000), his critical account of how South Asian and South Asianist scholars rely on Western social theory to analyze South Asian social realities. To provincialize Europe is to recognize that such theory (with its assumptions about progress, time, etc.) is situated in the particular European context of its production. Social theorists of South Asia, Chakrabarty argues, turn a blind eye to this situated context and apply such theory as if it were universal. Chakrabarty asks us to consider what kind of theory might emerge from South Asia, or from other regions for that matter, once we circumscribe the European theory we once took as universal.

In showing that the production of a particular body of social theory is situated in a particular context and that there are other contexts for which this theory does not apply, Chakrabarty is making an implicit argument about the symbolic properties of the realities such theory seeks to understand. Context is an effect of the symbolic. That is, without the symbolic we would not have linguistic, social, cultural, or historical contexts as we understand them. And yet this kind of context does not fully create or circumscribe our realities because we also live in a world that exceeds the symbolic, and this is something our social theory must also find ways to address.

Chakrabarty's argument, then, is ultimately couched within humanist assumptions about social reality and the theory one might develop to attend to it, and so, if taken literally, its application to an anthropology beyond the human is limited. Nonetheless, I find provincialization useful metaphorically as a reminder that symbolic domains, properties, and analytics are always circumscribed by and nested within a broader semiotic field.

We need to provincialize language because we conflate representation with language and this conflation finds its way into our theory. We universalize this distinctive human propensity by first assuming that all representation is something human and then by supposing that all representation has languagelike properties. That which ought to be delimited as something unique becomes instead the bedrock for our assumptions about representation.

We anthropologists tend to view representation as a strictly human affair. And we tend to focus only on symbolic representation—that uniquely human semiotic modality.¹⁶ Symbolic representation, manifested most clearly in language, is conventional, “arbitrary,” and embedded in a system of other such symbols, which, in turn, is sustained in social, cultural, and political contexts that have similar systemic and conventional properties. As I mentioned earlier, the representational system associated with Saussure, which is the implicit one that underlies so much of contemporary social theory, concerns itself only with this kind of arbitrary, conventional sign.

There is another reason why we need to provincialize language: we conflate language with representation even when we don’t explicitly draw on language or the symbolic for our theoretical tools. This conflation is most evident in our assumptions about ethnographic context. Just as we know that words only acquire meanings in terms of the greater context of other such words to which they systemically relate, it is an anthropological axiom that social facts can’t be understood except by virtue of their place in a context made up of other such facts. And the same applies for the webs of cultural meanings or for the network of contingent discursive truths as revealed by a Foucauldian genealogy.

Context understood in this way, however, is a property of human conventional symbolic reference, which creates the linguistic cultural and social realities that make us distinctively human. It doesn’t fully apply in domains such as human-animal relations that are not completely circumscribed by the symbolic but are nevertheless semiotic. The kinds of representational modalities shared by all forms of life—modalities that are iconic and indexical—are not context-dependent the way symbolic modalities are. That is, such representational modalities do not function by means of a contingent system of sign relations—a context—the way symbolic modalities do. So in certain semiotic domains context doesn’t apply, and even in those domains such as human ones where it does, such contexts, as we can see by attending to that which lies beyond the human, are, as I will show, permeable. In short, complex wholes are also open wholes—hence this chapter’s title. And open

wholes reach beyond the human—hence this anthropology beyond the human.

This conflation of representation with language—the assumption that all representational phenomena have symbolic properties—holds even for those kinds of projects that are explicitly critical of cultural, symbolic, or linguistic approaches. It is apparent in classical materialist critiques of the symbolic and the cultural. It is also apparent in more contemporary phenomenological approaches that turn to the bodily experiences we also share with nonhuman beings as a way to avoid anthropocentric mind talk (see Ingold 2000; Csordas 1999; Stoller 1997). It is also, I should note, apparent in Eduardo Viveiros de Castro's multinaturalism (discussed in detail in chapter 2). When Viveiros de Castro writes that "a perspective is not a representation because representations are a property of the mind or spirit, whereas the point of view is located in the body" (1998: 478), he is assuming that attention to bodies (and their natures) can allow us to side step the thorny issues raised by representation.

The alignment between humans, culture, the mind, and representation, on the one hand, and nonhumans, nature, bodies, and matter, on the other, remains stable even in posthuman approaches that seek to dissolve the boundaries that have been erected to construe humans as separate from the rest of the world. This is true of Deleuzian approaches, as exemplified, for example, by Jane Bennett (2010), that deny the analytical purchase of representation and telos altogether—since these are seen, at best, as exclusively human mental affairs.

This alignment is also evident in attempts in science and technology studies (STS), especially those associated with Bruno Latour, to equalize the imbalance between unfeeling matter and desiring humans by depriving humans of a bit of their intentionality and symbolic omnipotence at the same time that they confer on things a bit more agency. In his image of "speech impediments," for example, Latour attempts to find an idiom that might bridge the analytical gap between speaking scientists and their supposedly silent objects of study. "Better to have marbles in one's mouth, when speaking about scientists," he writes, "then to slip absent-mindedly from mute things to the indisputable word of the expert" (2004: 67). Because Latour conflates representation and human language his only hope to get humans and nonhumans in the same frame is to literally mix language and things—to speak with marbles in his mouth. But this solution perpetuates Cartesian dualism because the atomic elements remain either human mind or unfeeling matter, despite the fact that

these are more thoroughly mixed than Descartes would have ever dreamed, and even if one claims that their mixture precedes their realization. This analytic of mixture creates little homunculi at all levels. The hyphen in Latour's (1993: 106) "natures-cultures" is the new pineal gland in the little Cartesian heads that this analytic unwittingly engenders at all scales. An anthropology beyond the human seeks to find ways to move beyond this analytic of mixture.

Erasing the divide between the human mind and the rest of the world, or, alternatively, striving for some symmetrical mixing between mind and matter, only encourages this gap to emerge again elsewhere. An important claim I make in this chapter, and an important foundation for the arguments to be developed in this book, is that the most productive way to overcome this dualism is not to do away with representation (and by extension *telos*, intentionality, "aboutness," and selfhood), or simply project human kinds of representation elsewhere, but to radically rethink what it is that we take representation to be. To do this, we need first to provincialize language. We need, in Viveiros de Castro's words, to "decolonize thought," in order to see that thinking is not necessarily circumscribed by language, the symbolic, or the human.

This involves reconsidering who in this world represents, as well as what it is that counts as representation. It also involves understanding how different kinds of representation work and how these different kinds of representation variously interact with each other. What sort of life does semiosis take beyond the trappings of internal human minds, beyond specifically human propensities, such as the ability to use language, and beyond those specifically human concerns that those propensities engender? An anthropology beyond the human encourages us to explore what signs look like beyond the human.

Is such an exploration possible? Or do the all-too-human contexts in which we live bar us from such an endeavor? Are we forever trapped inside our linguistically and culturally mediated ways of thinking? My answer is no: a more complete understanding of representation, which can account for the ways in which that exceptionally human kind of semiosis grows out of and is constantly in interplay with other kinds of more widely distributed representational modalities, can show us a more productive and analytically robust way out of this persistent dualism.

We humans are not the only ones who do things for the sake of a future by re-presenting it in the present. All living selves do this in some way or another. Representation, purpose, and future are in the world—and not just in that part of the world that we delimit as human mind. This is why it is appropriate

to say that there is agency in the living world that extends beyond the human. And yet reducing agency to cause and effect—to “affect”—side steps the fact that it is human and nonhuman ways of “thinking” that confer agency. Reducing agency to some sort of generic propensity shared by humans and nonhumans (which in such approaches includes objects) thanks to the fact that these entities can all equally be represented (or that they can confound these representations), and that they then participate by virtue of this in some sort of very humanlike narrative, trivializes this thinking by failing to distinguish among ways of thinking and by indiscriminately applying distinctively human ways of thinking (based on symbolic representation) to any entity.

The challenge is to defamiliarize the arbitrary sign whose peculiar properties are so natural to us because they seem to pervade everything that is in any way human and anything else about which humans can hope to know. That you can feel *tsupu* without knowing Quichua makes language appear strange. It reveals that not all the signs with which we traffic are symbols and that those nonsymbolic signs can in important ways break out of bounded symbolic contexts like language. This explains not only why we can come to feel *tsupu* without speaking Quichua but also why Hilario can communicate with a nonsymbolic being. Indeed, the startled monkey's jump, and the entire ecosystem that sustains her, constitutes a web of semiosis of which the distinctive semiosis of her human hunters is just one particular kind of thread.

To summarize: signs are not exclusively human affairs. All living beings sign. We humans are therefore at home with the multitude of semiotic life. Our exceptional status is not the walled compound we thought we once inhabited. An anthropology that focuses on the relations we humans have with nonhuman beings forces us to step beyond the human. In the process it makes what we've taken to be the human condition—namely, the paradoxical, and “provincialized,” fact that our nature is to live immersed in the “unnatural” worlds we construct—appear a little strange. Learning how to appreciate this is an important goal of an anthropology beyond the human.

THE FEELING OF RADICAL SEPARATION

The Amazon's many layers of life amplify and make apparent these greater than human webs of semiosis. Allowing its forests to think their ways through us can help us appreciate how we too are always, in some way or another, embedded in such webs and how we might do conceptual work with this fact.

This is what draws me to this place. But I've also learned something from attending to those times when I've felt cut off from these broader semiotic webs that extend beyond the symbolic. Here I reflect on such an experience that I had on one of the many bus trips I made from Quito to the Amazon region. I relay the feeling of what happened on this trip, not as a personal indulgence, but because I think it reveals a specific quality of symbolic modes of thinking—the propensity that symbolic thought has to jump out of the broader semiotic field from which it emerges, separating us, in the process, from the world around us. As such, this experience can also teach us something about how to understand the relation that symbolic thought has to the other kinds of thought in the world with which it is continuous and from which it emerges. In this sense, this reflection on my experience is also part of a broader critique, developed in the following two sections, of the dualistic assumptions at the base of so many of our analytical frameworks. I explore this experience of becoming dual, of feeling ripped out of a broader semiotic environment, that I had on a trip down to el Oriente, Ecuador's Amazonian region east of the Andes, by means of a narrative detour. Apart from serving as a bit of a respite from the conceptual work done in this chapter, I hope it will give some sense of the way in which Ávila itself is embedded in a landscape with a history. For this trip traces the trajectories of many other trips, and all of these catch this place up in so many kinds of webs.

The past few days had been unusually rainy on the eastern slopes of the Andes, and the main road leading down to the lowlands had been intermittently washed out. Joined by my cousin Vanessa, who was in Ecuador visiting relatives, I boarded a bus headed for the Oriente. With the exception of a group of Spanish tourists occupying the back rows, the bus was filled with locals who lived along the route or in Tena, the capital of Napo Province and the bus's final destination. This was a trip I had made many times by now, and it was our plan to take this bus along its route over the high cordillera east of Quito that divides the Amazonian watershed from the inter-Andean valley and then to follow this down through the village of Papallacta, the site of a pre-I hispanic cloud forest settlement situated along one of the major trade routes through which highland and lowland products flowed (I refer you to figure 1 on page 4). Today Papallacta is an important pumping station for Amazonian resources such as crude oil, which since the 1970s has transformed the country's economy and opened up the Oriente for development, and, more recently, drinking water for Quito tapped from the vast

watershed east of the Andes. Nestled in a mountain chain that still experiences frequent geological activity, it is also the site of some very popular hot springs. Papallacta is, like many of the other cloud forest towns we would pass on our route, now mainly inhabited by highland settlers. The road is carved out of the precipitous gorges of the Quijos River valley, which it follows through what was the stronghold of the pre-Hispanic and early colonial alliance of Quijos chiefdoms. The ancestors of the Ávila Runa formed part of this alliance. Farmers regularly expose thousand-year-old residential terraces as they clear the steep forested slopes to create pastures. The route continues along the trajectory of the foot trails that until the 1960s connected Ávila and other lowland Runa villages like it, by means of an arduous eight-day journey, to Quito. We would take this road through the town of Baeza, which, along with Ávila and Archidona, was the first Spanish settlement founded in the Upper Amazon. Baeza was almost sacked in the same regionally coordinated 1578 indigenous uprising—sparked by the shamanic vision of a cow-god—that completely destroyed Ávila and left virtually all its Spanish inhabitants dead. Today's Baeza bears little resemblance to that historical town—having been relocated a few kilometers away following a large earthquake in 1987. Just before Baeza there is a fork in the road. One branch heads northeast toward the town of Lago Agrio. This was the first major center of oil extraction in Ecuador, and its name is a literal translation of Sour Lake, the site where oil was first discovered in Texas (and the birthplace of Texaco). The other branch, the one we would take, follows an older route to the town of Tena. In the 1950s Tena represented the boundary between civilization and the "savage" heathens (the Huaorani) to the east. Now it is a quaint town. After winding through steep and unstable terrain we would cross the Cosanga River where 150 years ago the Italian explorer Gaetano Osculati was abandoned by his Runa porters and forced to spend several miserable nights alone fending off jaguars (Osculati 1990). After this crossing there would be a final climb through the Huacamayos Cordillera, which is the last range to be traversed before dropping down to the warm valleys that lead to Archidona and Tena. On a clear day one can catch from here the shimmering reflections off the metal roofs in Archidona down below, as well as the road that goes from Tena to Puerto Napo, where it cuts a swath of red earth in the steep grade of a hill. Puerto Napo is the long abandoned "port" on the Napo River (indicated by a little anchor in figure 1), which flows into the Amazon. It had the misfortune of being situated just upstream from a dangerous whirlpool. If there are no clouds one can also see

the sugar cone peak of the Sumaco Volcano on whose foothills Ávila sits. An area of close to 200,000 hectares making up the peak and many of its slopes is protected as a biosphere reserve. This reserve, in turn, is surrounded by a much larger area, which is designated as national forest. Ávila territory forms a border with this vast expanse on its western boundary.

Once out of the mountains the air becomes warmer and heavier as we pass little hamlets settled by lowland Runa. Finally, at another fork an hour before arriving at Tena, we would hop off to wait for a second bus that works its way along this decidedly more local and personal route. On this tertiary road a bus driver might stop to broker a deal on a few boxes of the tart *naranjilla* fruits used to make breakfast juice throughout Ecuador.¹⁷ Or he might be persuaded to wait a few minutes for a regular passenger. This is a relatively new road, having been completed in the aftermath of the 1987 earthquake with the not entirely disinterested help of the U.S. Army Corps of Engineers. It winds through the foothills that circle Sumaco before heading out across the Amazonian plain at Loreto. It ends at the town of Coca at the confluence of the Coca and Napo Rivers. Coca, like Tena, but several decades later, also served as a frontier outpost of the Ecuadorian state as its control expanded deeper into this region. This road cuts through what used to be the hunting territories of the Runa villages of Cotapino, Loreto, Ávila, and San José, which, along with a handful of "white"-owned estates, or haciendas, and a Catholic mission in Loreto, were the only settlements in this area before the 1980s. Today large portions of these hunting territories are occupied by outsiders—either fellow Runa from the more densely populated Archidona region (whom people in Ávila refer to as *boulu*, from *pueblo*, referring to the fact that they are more city-wise) or small-time farmers and merchants of coastal or highland origin who are often referred to as *colonos* (or *jahua llacta*, in Quichua; lit., "highlanders").

Right after crossing the immense steel panel bridge that traverses the Suno River, one of several such structures along this route donated by the U.S. Army, we would get off at Loreto, the parish seat and biggest town on the road. We would spend the night here at the Josephine mission run by Italian priests. The following day we would retrace our steps, either by foot or by pickup truck, back over the bridge and then along a dirt road that follows the Suno River through colonist farms and pastures until we hit the trail leading to Ávila. Roads in eastern Ecuador extend in fits and starts over many years. Their growth spurts usually coincide with local election campaigns. When

I first started visiting Ávila in 1992 there were only foot trails from Loreto, and it would take me the better part of a day to get to Hilario's house. On my most recent visit one could, on a dry day, get to the easternmost portion of Ávila territory by pickup truck.

This was the route we had hoped to traverse. In fact, we didn't make it to Loreto that day. Not too far after Papallacta we encountered the first of a series of landslides set off by the heavy rains. And while our bus, along with a growing string of trucks, tankers, buses, and cars, waited for this to be cleared we became trapped by another landslide behind us.

This is steep, unstable, and dangerous terrain. The landslides reawakened in me a jumble of disturbing images from a decade of traveling this road: a snake frantically tracing figure eights in an immense mudflow that had washed over the road moments before we had gotten there; a steel bridge buckled in half like a crushed soda can by a slurry of rocks let loose as the mountain above it came down; a cliff splattered with yellow paint, the only sign left of the delivery truck that had careened into the ravine the night before. But landslides mostly cause delays. Those that can't quickly be cleared become sites for "*trasbordos*," an arrangement whereby oncoming buses that can no longer reach their destinations exchange passengers before turning back.

On this day a *trasbordo* was out of the question. Traffic was backed up in both directions, and we were trapped by a series of landslides scattered over a distance of several kilometers. The mountain above was starting to fall on us. At one point a rock crashed down onto our roof. I was scared.

No one else, however, seemed to think we were in danger. Perhaps out of sheer nerve, fatalism, or the need, above anything else, to complete the trip, neither the driver nor his assistant ever lost his cool. To a certain extent I could understand this. It was the tourists that baffled me. These middle-aged Spanish women had booked one of the tours that visit the rain forests and indigenous villages along the Napo River. As I worried, these women were joking and laughing. At one point one even got off the bus and walked ahead a few cars to a supply truck off of which she bought ham and bread and proceeded to make sandwiches for her group.

The incongruity between the tourists' nonchalance and my sense of danger provoked in me a strange feeling. As my constant *what-ifs* became increasingly distant from the carefree chattering tourists, what at first began as a diffuse sense of unease soon morphed into a sense of profound alienation.

This discrepancy between my perception of the world and that of those around me sundered me from the world and those living in it. All I was left with were my own thoughts of future dangers spinning themselves out of control. And then something more disturbing happened. Because I sensed that my thoughts were out of joint with those around me, I soon began to doubt their connection to what I had always trusted to be there for me: my own living body, the body that would otherwise give a home to my thoughts and locate this home in a world whose palpable reality I shared with others. I came, in other words, to feel a tenuous sense of existence without location—a sense of deracination that put into question my very being. For if the risks I was so sure of didn't exist—after all, no one else on that bus seemed frightened that the mountain would fall on us—then why should I trust my bodily connection to that world? Why should I trust “my” connection to “my” body? And if I didn't have a body what was “I”? Was I even alive? Thinking like this, my thoughts ran wild.

This feeling of radical doubt, the feeling of being cut off from my body and a world whose existence I no longer trusted, didn't go away when several hours later the landslides were cleared and we were able to get through. Nor did it subside when we finally got to Tena (it was too late to make it to Loreto that night). Not even in the relative comfort of my old haunt the hotel El Dorado did I manage to feel much better. This simple but cozy family-run inn used to be my stopping point when I was doing research in Runa communities on the Napo River.¹⁸ It was owned by *don* Salazar, a veteran—with the scar to prove it—of Ecuador's short war with Peru in which Ecuador lost a third of its territory and access to the Amazon River. The hotel's name, El Dorado, appropriately marks this loss by paying homage to that never quite attainable City of Gold that lies somewhere deep in the Amazon (see Slater 2002; see also chapters 5 and 6).

The next morning after a fitful night I was still out of sorts. I couldn't stop imagining different dangerous scenarios, and I still felt cut off from my body and from those around me. Of course I pretended I wasn't feeling any of this. Trying at least to act normal, and in the process compounding my private anxiety by failing to give it a social existence, I took my cousin for a short walk along the banks of the Misahualli River, which cuts the town of Tena in half. Within a few minutes I spotted a tanager feeding in the shrubs at the scruffy edges of town where molding cinder blocks meet polished river cobbles. I had brought along my binoculars and managed, after some searching, to locate the bird. I rolled the focusing knob and the moment that bird's thick black beak

became sharp I experienced a sudden shift. My sense of separation simply dissolved. And, like the tanager coming into focus, I snapped back into the world of life.

There is a name for what I felt on that trip to the Oriente: anxiety. After reading *Constructing Panic* (1995), a remarkable account, written by the late psychologist Lisa Capps and the linguistic anthropologist Elinor Ochs, of one woman's lifelong struggles with anxiety, I've come to an understanding of this condition as revealing something important about the specific qualities of symbolic thought. Here is how Meg, the woman they write about, experiences the suffocating weight of all of the future possibles opened up by the symbolic imagination.

Sometimes I get to the end of the day and feel exhausted by all of the "what if that had happened" and "what if this happens." And then I realize that I've been sitting on the sofa—that it's just me and my own thoughts driving me crazy. (Capps and Ochs 1995: 25)

Capps and Ochs describe Meg as "desperate" to "experience the reality that she attributes to normal people" (25). Meg feels "severed from an awareness of herself and her environment as familiar and knowable" (31). She senses that her experience does not fit with what, according to others, "happened" (24), and she thus has no one with whom to share a common image of the world, or a set of assumptions about how it works. Furthermore, she can't seem to ground herself in any specific place. Meg often uses the construction, "here I am," to express her existential predicament, but a crucial element is missing: "she is telling her interlocutors that she exists, but not where in particular she is located" (64).

The title *Constructing Panic* is intended by the authors to refer to how Meg discursively constructs her experience of panic—their assumption being that "the stories people tell construct who they are and how they view the world" (8). But I think the title reveals something deeper about panic. It is precisely the constructive quality of symbolic thought, the fact that symbolic thought can create so many virtual worlds, that makes anxiety possible. It is not just that Meg constructs her experience of panic linguistically, socially, culturally, in other words, symbolically, rather than panic itself is a symptom of symbolic construction run wild.

Reading Capps and Ochs's discussion of Meg's experience of panic, and thinking about it semiotically, I think I have come to an understanding of what happened on that trip to the Oriente, the factors that produced panic in me, and

those that led to its dissipation. As with Meg, who locates her first experiences of anxiety in situations in which her legitimate fears were not socially recognized (31), my anxiety emerged as I was confronted with the disconnect between my well-founded fear and the carefree attitudes of the tourists on the bus.

Symbolic thought run wild can create minds radically separate from the indexical grounding their bodies might otherwise provide. Our bodies, like all of life, are the products of semiosis. Our sensory experiences, even our most basic cellular and metabolic processes, are mediated by representational—though not necessarily symbolic—relations (see chapter 2). But symbolic thought run wild can make us experience “ourselves” as set apart from everything: our social contexts, the environments in which we live, and ultimately even our desires and dreams. We become displaced to such an extent that we come to question the indexical ties that would otherwise ground this special kind of symbolic thinking in “our” bodies, bodies that are themselves indexically grounded in the worlds beyond them: *I think therefore I doubt that I am.*

How is this possible? And why is it that we don't all live in a constant state of skeptical panic? That my sense of anxious alienation dissipated the moment the bird came into sharp focus provides some insights into the conditions under which symbolic thought can become so radically separate from the world, as well as those under which it can fall back into place. I do not, by any means, wish to romanticize tropical nature or privilege anyone's connection to it. This sort of regrounding can happen anywhere. Nonetheless, sighting that tanager in the bush at the messy edge of town taught me something about how immersion in this particularly dense ecology amplifies and makes visible a larger semiotic field beyond that which is exceptionally human, one in which we are all—usually—emplaced. Seeing that tanager made me sane by allowing me to situate the feeling of radical separation within something broader. It resituated me in a larger world “beyond” the human. My mind could return to being part of a larger mind. My thoughts about the world could once again become part of the thoughts of the world. An anthropology beyond the human strives to grasp the importance of these sorts of connections while appreciating why we humans are so apt to lose sight of them.

NOVELTY OUT OF CONTINUITY

Thinking about panic in this way has led me to question more broadly how best to theorize the separation that symbolic thought creates. We tend to

assume that because something like the symbolic is exceptionally human and thus novel (at least as far as earthly life is concerned) it must also be radically separate from that from which it comes. This is the Durkheimian legacy we inherit: social facts have their own kind of novel reality, which can only be understood in terms of other such social facts and not in terms of anything—be it psychological, biological, or physical—prior to them (see Durkheim 1972: 69–73). But the sense of radical separation that I experienced is psychically untenable—even life negating in some sense. And this leads me to suspect that there is something the matter with any analytical approach that would take such a separation as its starting point.

If, as I claim, our distinctively human thoughts stand in continuity with the forest's thoughts insofar as both are in some way or other the products of the semiosis that is intrinsic to life (see chapter 2), then an anthropology beyond the human must find a way to account for the distinctive qualities of human thought without losing sight of its relation to these more pervasive semiotic logics. Accounting conceptually for the relation this novel dynamic has to that from which it comes can help us better understand the relationship between what we take to be distinctively human and that which lies beyond us. In this regard I want to think here about what panic, and especially its resolution, has taught me. To do so I draw on a series of Amazonian examples to trace the ways in which iconic, indexical, and symbolic processes are nested within each other. Symbols depend on indices for their being and indices depend on icons. This allows us to appreciate what makes each of these unique without losing sight of how they also stand in a relation of continuity with each other.

Following Deacon (1997), I begin with a counterintuitive example at the very margins of semiosis. Consider the cryptically camouflaged Amazonian insect known as the walking stick in English because its elongated torso looks so much like a twig. Its Quichua name is *shanga*. Entomologists call it, appropriately, a phasmid—as in phantom—placing it in the order Phasmida and the family Phasmidae. This name is fitting. What makes these creatures so distinctive is their lack of distinction: they disappear like a phantom into the background. How did they come to be so phantasmic? The evolution of such creatures reveals important things about some of the “phantomlike” logical properties of semiosis that can, in turn, help us understand some of the counterintuitive properties of life “itself”—properties that are amplified in the Amazon and Runa ways of living there. For this reason, I will return to this example throughout the book. Here I want to focus on it with an eye to

understanding how the different semiotic modalities—the iconic, the indexical, the symbolic—have their own unique properties at the same time that they stand in a relation of nested continuity to each other.

How did walking sticks come to be so invisible, so phantomlike? That such a phasmid looks like a twig does not depend on anyone noticing this resemblance—our usual understanding of how likeness works. Rather, its likeness is the product of the fact that the ancestors of its potential predators did not notice its ancestors. These potential predators failed to notice the differences between these ancestors and actual twigs. Over evolutionary time those lineages of walking sticks that were least noticed survived. Thanks to all the proto-walking sticks that were noticed—and eaten—because they differed from their environments walking sticks came to be more like the world of twigs around them.¹⁹

How walking sticks came to be so invisible reveals important properties of iconicity. Iconicity, the most basic kind of sign process, is highly counterintuitive because it involves a process by which two things are not distinguished. We tend to think of icons as signs that point to the similarities among things we know to be different. We know, for example, that the iconic stick figure of the man on the bathroom door resembles but is not the same as the person who might walk through that door. But there is something deeper about iconicity that is missed when we focus on this sort of example. Semiosis does not begin with the recognition of any intrinsic similarity or difference. Rather, it begins with not noticing difference. It begins with indistinction. For this reason iconicity occupies a space at the very margins of semiosis (for there is nothing semiotic about never noticing anything at all). It marks the beginning and end of thought. With icons new interpretants—subsequent signs that would further specify something about their objects—are no longer produced (Deacon 1997: 76, 77); with icons thought is at rest. Understanding something, however provisional that understanding may be, involves an icon. It involves a thought that is like its object. It involves an image that is a likeness of that object. For this reason all semiosis ultimately relies on the transformation of more complex signs into icons (Peirce CP 2.278).

Signs, of course, provide information. They tell us something new. They tell us about a difference. That is their reason for being. Semiosis must then involve something other than likeness. It must also involve a semiotic logic that points to something else—a logic that is indexical. How do the semiotic logics of likeness and difference relate to each other? Again, following Deacon (1997), con-

sider the following schematic explanation of how that woolly monkey that Hilario and Lucio were trying to frighten out of her hidden canopy perch might learn to interpret a crashing palm as a sign of danger.²⁰ The thundering crash she heard would iconically call to mind past experiences of similar crashes. These past experiences of crashing sounds share with each other additional similarities, such as their co-occurrence with something dangerous—say, a branch breaking or a predator approaching. The monkey would in addition iconically link these past dangers to each other. That the sound made by a crashing tree might indicate danger is, then, the product of, on the one hand, iconic associations of loud noises with other loud noises, and, on the other, iconic associations of dangerous events with other dangerous events. That these two sets of iconic associations are repeatedly linked to each other encourages the current experience of a sudden loud noise to be seen as linked to them. But now this association is also something more than a likeness. It impels the monkey to “guess” that the crash must be linked to something other than itself, something different. Just as a wind vane, as an index, is interpreted as pointing to something other than itself, namely, the direction in which the wind is blowing, so this loud noise is interpreted as pointing to something more than just a noise; it points to something dangerous.

Indexicality, then, involves something more than iconicity. And yet it emerges as a result of a complex hierarchical set of associations among icons. The logical relationship between icons and indices is unidirectional. Indices are the products of a special layered relation among icons but not the other way around. Indexical reference, such as that involved in the monkey’s take on the crashing tree, is a higher-order product of a special relationship among three icons: crashes bring to mind other crashes; dangers associated with such crashes bring to mind other such associations; and these, in turn, are associated with the current crash. Because of this special configuration of icons the current crash now points to something not immediately present: a danger. In this way an index emerges from iconic associations. This special relationship among icons results in a form of reference with unique properties that derive from but are not shared with the iconic associational logics with which they are continuous. Indices provide information; they tell us something new about something not immediately present.

Symbols, of course, also provide information. How they do so is both continuous with and different from indices. Just as indices are the product of relations among icons and exhibit unique properties with respect to these more

fundamental signs, symbols are the product of relations among indices and have their own unique properties. This relationship also goes only in one direction. Symbols are built from a complex layered interaction among indices, but indices do not require symbols.

A word, such as *chorongo*, one of the Ávila names for woolly monkey, is a symbol par excellence. Although it can serve an indexical function—pointing to something (or, more appropriately, someone)—it does so indirectly, by virtue of its relation to other words. That is, the relation that such a word has to an object is primarily the result of the conventional relation it has acquired to other words and not just a function of the correlation between sign and object (as with an index). Just as we can think of indexical reference as the product of a special configuration of iconic relations, we can think of symbolic reference as the product of a special configuration of indexical ones. What is the relationship of indices to symbols? Imagine learning Quichua. A word such as *chorongo* is relatively easy to learn. One can learn that it refers to what in English is called a woolly monkey quite quickly. As such, it isn't really functioning symbolically. The pointing relationship between this "word" and the monkey is primarily indexical. The commands that dogs learn are very much like this. A dog can come to associate a "word" like *sit* with a behavior. As such, "sit" functions indexically. The dog can understand "sit" without understanding it symbolically. But there is a limit to how far we can go toward learning human language by memorizing words and what they point to; there are just too many individual sign-object relationships to keep track of. Furthermore, rote memorization of sign-object correlations misses the logic of language. Take a somewhat more complex word like *causanguichu*, which I discussed earlier in this chapter. Non-Quichua speakers can quickly learn that it is a greeting (uttered only in certain social contexts), but getting a sense of what and how it means requires us to understand how it relates to other words and even smaller units of language.

Words like *chorongo*, *sit*, or *causanguichu* do of course refer to things in the world, but in symbolic reference the indexical relation of word to object becomes subordinate to the indexical relation of word to word in a system of such words. When we learn a foreign language or when infants acquire language for the first time there is a shift away from using linguistic signs as indices to appreciating them in their broader symbolic contexts. Deacon (1997) describes one experimental setting where such a shift is particularly apparent. He discusses a long-term lab experiment in which chimps, already adept in

their everyday lives at interpreting signs indexically, were trained to replace this interpretive strategy with a symbolic one.²¹

First, the chimps in the experiment had to interpret certain sign vehicles (in this case keyboard keys with certain shapes on them) as indices of certain objects or acts (such as particular food items or actions). Next, such sign vehicles had to be seen as indexically connected to each other in a systematic way. The final, and most difficult and most important, step involved an interpretive shift whereby objects were no longer picked out in a direct fashion by the individual indexical signs but instead came to be picked out indirectly, by virtue of the ways in which the signs representing them related to each other and the ways in which these sign relations then mapped onto how the objects themselves were to be thought to relate to each other. The mapping between these two levels of indexical associations (those linking objects to objects and those linking signs to signs) is iconic (Deacon 1997: 79–92). It involves not noticing the individual indexical associations by which signs can pick out objects in order to see a more encompassing likeness between the relations that link a system of signs and those that link a set of objects.

I am now in a position to account for the sense of separation—which I experienced as panic on the bus ride I described earlier—that the symbolic creates. I can now do so with regard to the more basic forms of reference to which it relates and with which it is continuous.

The symbolic is a prime example of a kind of dynamic that Deacon calls “emergent.” For Deacon, an emergent dynamic is one in which particular configurations of constraints on possibility result in unprecedented properties at a higher level. Crucially, however, something that is emergent is never cut off from that from which it came and within which it is nested because it still depends on these more basic levels for its properties (Deacon 2006). Before considering symbolic reference as emergent with respect to other semiotic modalities it is useful to think about how emergence works in the nonhuman world.

Deacon recognizes a series of nested emergent thresholds. An important one is self-organization. Self-organization involves the spontaneous generation, maintenance and propagation of form under the right circumstances. Although relatively ephemeral and rare, self-organization is nonetheless found in the nonliving world. Examples of self-organizing emergent dynamics include the circular whirlpools that sometimes form in Amazonian rivers, or the geometric lattices of crystals or snowflakes. Self-organizing dynamics are

more regular and more constrained than the physical entropic dynamics—such as those involved, for example, in the spontaneous flow of heat from a warmer to a colder part of a room—from which they emerge and on which they depend. Entities that exhibit self-organization, such as crystals, snowflakes, or whirlpools, are not alive. Nor, despite their name, do they involve a self.

Life, by contrast, is a subsequent emergent threshold nested within self-organization. Living dynamics, as represented by even the most basic organisms, selectively “remember” their own specific self-organizing configurations, which are differentially retained in the maintenance of what can now be understood as a self—a form that is reconstituted and propagated over the generations in ways that exhibit increasingly better fits to the worlds around it. Living dynamics, as I explore in greater detail in the following chapter, are constitutively semiotic. The semiosis of life is iconic and indexical. Symbolic reference, that which makes humans unique, is an emergent dynamic that is nested within this broader semiosis of life from which it stems and on which it depends.

Self-organizing dynamics are distinct from the physical processes from which they emerge and with which they are continuous, and within which they are nested. Living dynamics have a similar relation to the self-organizing dynamics from which they, in turn, emerge, and the same can be said for the relation that symbolic semiosis has to the broader iconic and indexical semiotic processes of life from which it emerges (Deacon 1997: 73).²² Emergent dynamics, then, are directional both in a logical and in an ontological sense. That is, a world characterized by self-organization need not include life, and a living world need not include symbolic semiosis. But a living world must also be a self-organizing one, and a symbolic world must be nested within the semiosis of life.

I can now return to the emergent properties of symbolic representation. This form of representation is emergent with respect to iconic and indexical reference in the sense that, as with other emergent dynamics, the systemic structure of relationships among symbols is not prefigured in the antecedent modes of reference (Deacon 1997: 99). Like other emergent dynamics symbols have unique properties. The fact that symbols achieve their referential power by virtue of the systemic relations they have to each other means that, as opposed to indices, they can retain referential stability even in the absence of their objects of reference. This is what confers on symbols their unique

characteristics. It is what allows symbolic reference to be not only about the here and now, but about the "what if." In the realm of the symbolic, the separation from materiality and energy can be so great and the causal links so convoluted that reference acquires a veritable freedom. And this is what has led to treating it as if it were radically separate from the world (see also Peirce CP 6.101).

Yet, like other emergent dynamics, such as the vortex of a whirlpool formed in a river's current, symbolic reference is also closely tied to the more basic dynamics out of which it grows. This is true in the way that symbols are constructed as well as in the way in which they are interpreted. Symbols are the outcome of a special relationship among indices, which in turn are outcomes of a special relationship that links icons in a particular way. And symbolic interpretation works via pairings of sets of indexical relations, which are ultimately interpreted by recognizing the iconicity between them: all thought ends with an icon. Symbolic reference, then, is ultimately the product of a series of highly convoluted systemic relations among icons. And yet it has properties that are unique when compared to iconic and indexical modalities. Symbolic reference does not exclude these other kinds of sign relations. Symbolic systems such as language can, and regularly do, incorporate relatively iconic signs, as in the case of "words" like *tsupu*, and they are also completely dependent on iconicity at a variety of levels as well as on all sorts of pointing relationships among signs and between systems of signs and the things they represent. Symbolic reference, finally, like all semiosis, is also ultimately dependent on the more fundamental material, energetic, and self-organizing processes from which it emerges.

Thinking of symbolic reference as emergent can help us understand how, via symbols, reference can become increasingly separated from the world but without ever fully losing the potential to be susceptible to the patterns, habits, forms, and events of the world.

Seeing symbolic reference and by extension human language and culture as emergent follows in the spirit of Peirce's critique of dualistic attempts to separate (human) mind from (nonhuman) matter—an approach that he acerbically characterized as "the philosophy which performs its analyses with an axe, leaving as the ultimate elements, unrelated chunks of being" (CP 7.570). An emergentist approach can provide a theoretical and empirical account of how the symbolic is in continuity with matter at the same time that it can come to be a novel causal locus of possibility. This continuity allows us to recognize

how something so unique and separate is also never fully cut off from the rest of the world. This gets at something important about how an anthropology beyond the human seeks to situate that which is distinctive to humans in the broader world from which it emerges.

Panic and its dissipation reveal these properties of symbolic semiosis. They point both to the real dangers of unfettered symbolic thought and to how such thought can be regrounded. Watching birds regrounded my thoughts, and by extension my emerging self, by re-creating the semiotic environment in which symbolic reference is itself nested. Through the artifice of my binoculars I became indexically aligned with a bird, thanks to the fact that I was able to appreciate its image now coming into sharp focus right there in front of me. This event reimmersed me in something that Meg, on her sofa, alone with her thoughts, was not so readily able to find: a knowable (and shareable) environment, and the assurance, for the moment, of some sort of existence, tangibly located in a here and now that extended beyond me but of which I too could come to be a part.

Panic provides us with intimations of what radical dualism might feel like, and why for us humans dualism seems so compelling. In tracing its untenable effects panic also provides its own visceral critique of dualism and the skepticism that so often accompanies it. In panic's dissolution we can also get a sense for how a particular human propensity for dualism is dissolved into something else. One might say that dualism, wherever it is found, is a way of seeing emergent novelty as if it were severed from that from which it emerged.

EMERGENT REALS

By watching birds on the banks of the river that morning in Tena I certainly got out of my head in the colloquial sense, but what was I stepping into? Although the more basic semiotic modes of engagement involved in that activity quite literally brought me back to my senses and in the process regrounded me in a world beyond myself—beyond my mind, beyond convention, beyond the human—this experience has led me to ask what kind of world is this that lies out there beyond the symbolic? In other words, this experience, understood in the context of the anthropology beyond the human that I seek here to develop, forces me to rethink what we mean by the “real.”

We generally think of the real as that which exists. The palm tree that came crashing down in the forest is real; the shorn branches and crushed plants left

in the wake of its fall are proof of its awesome facticity. But a restricted characterization of the real as something that happened—out there and law-bound—can't account for spontaneity, or life's tendency for growth. Nor can it account for the semiosis shared by the living—a semiosis that emerges from and ultimately grounds us humans in the world of life. Furthermore, such a characterization would dualistically reinscribe all possibility in that separate chunk of being we delimit as the human mind with no intimation of how that mind, its semiosis and its creativity, could have emerged from or otherwise be related to anything else.

Peirce was quite concerned with this problem of how to imagine a more capacious real that is more true to a naturalistic, nondualist understanding of the universe and, throughout his career, strove to situate his entire philosophical project—including his semiotics—within a special kind of realism that could encompass actual existence within a broader framework that would account for its relationship to spontaneity, growth, and the life of signs in human and nonhuman worlds. I turn here to a brief exposition of his framework because it provides a vision of the real that can encompass living minds and nonliving matter, as well as the many processes through which the former emerged from the latter.

According to Peirce there are three aspects of the real of which we can become aware (CP 1.23–26). The element of the real that is easiest for us to comprehend is what Peirce called "secondness." The crashing palm is a quintessential second. Secondness refers to otherness, change, events, resistance, and facts. Seconds are "brutal" (CP 1.419). They "shock" (CP 1.336) us out of our habitual ways of imagining how things are. They force us to "think otherwise than we have been thinking" (CP 1.336).

Peirce's realism also encompasses something he called "firstness." Firsts are "mere may-bes, not necessarily realized." They involve the special kind of reality of a spontaneity, a quality, or a possibility (CP 1.304), in its "own suchness" (CP 1.424), regardless of its relation to anything else. One day out in the forest Hilario and I came across a bunch of wild passion fruits that had been knocked down by a troop of monkeys feeding up above. We took a break from our trek to snack on the monkeys' leftovers. As I cracked open the fruit, I caught, just for an instant, a pungent whiff of cinnamon. By the time I brought the fruit to my mouth it was gone. The experience of the fleeting smell, in and of itself, without attention to where it came from, what it is like, or to what it connects, approaches firstness.

Thirdness, finally, is that aspect of Peirce's realism that is the most important to the argument in this book. Drawing inspiration from the medieval Scholastics, Peirce insisted that "generals are real." That is, habits, regularities, patterns, relationality, future possibilities, and purposes—what he called thirds—have an eventual efficacy, and they can originate and manifest themselves in worlds outside of human minds (CP 1.409). The world is characterized by "the tendency of all things to take habits" (CP 6.101): the general tendency in the universe toward an increase in entropy is a habit; the less common tendency toward increases in regularity, exhibited in self-organizing processes such as the formation of circular whirlpools in a river or crystal lattice structures, is also a habit; and life, with its ability to predict and harness such regularities and, in the process, create an increasing array of novel kinds of regularities, amplifies this tendency toward habit taking. This tendency is what makes the world potentially predictable and what makes life as a semiotic process, which is ultimately inferential,²³ possible. For it is only because the world has some semblance of regularity that it can be represented. Signs are habits about habits. Tropical forests with their many layers of coevolved life-forms amplify this tendency toward habit taking to an extreme.

All processes that involve mediation exhibit thirdness. Accordingly, all sign processes exhibit thirdness because they serve as a third term that mediates between "something" and some sort of "someone" in some way. However, it is important to stress that for Peirce, although all signs are thirds, not all thirds are signs.²⁴ Generality, the tendency toward habit, is not a feature that is imposed on the world by a semiotic mind. It is out there. The thirdness in the world is the condition for semiosis, it is not something that semiosis "brings" to the world.

For Peirce everything exhibits, to some degree or other, firstness, secondness, and thirdness (CP 1.286, 6.323). Different kinds of sign processes amplify certain aspects of each of these to the neglect of others. Although all signs are intrinsically triadic, in that they all represent something to a someone, different kinds of signs attend more toward either firstness, secondness, or thirdness.

Icons, as thirds, are relative firsts in that they mediate by the fact that they possess the same qualities as their objects regardless of their relation to anything else. This is why Quichua imagistic "words" like *tsupu* cannot be negated or inflected. There is a way in which they are just qualities in their "own suchness." Indices, as thirds, are relative seconds because they mediate by being

affected by their objects. The crashing palm startled the monkey. Symbols, as thirds, by contrast, are doubly triadic because they mediate by reference to something general—an emerging habit. They mean by virtue of the relationship they have to the conventional and abstract system of symbols—a system of habits—that will come to interpret them. This is why understanding *causanguichu* requires a familiarity with Quichua as a whole. The symbolic is a habit about a habit that, to a degree unprecedented elsewhere on this planet, begets other habits.

Our thoughts are like the world because we are of the world.²⁵ Thought (of any kind) is a highly convoluted habit that has emerged out of, and is continuous with, the tendency in the world toward habit taking. In this manner Peirce's special kind of realism can allow us to begin to envision an anthropology that can be about the world in ways that recognize but also go beyond the limits of human-specific ways of knowing. Rethinking semiosis is the place from which to begin such an endeavor.

It is through this expanded vision of the real that we can consider what it was that I was getting out of when that bird came into focus through the glass of my binoculars, and what it was in that process that I stepped into. As Capps and Ochs astutely point out, what is so disturbing about panic is the feeling of being out of sync with others. We come to be alone with thoughts that become increasingly cut off from the broader field of habits that gave rise to them. In other words, there is always the danger that symbolic thought's unmatched ability to create habit can pull us out of the habits in which we are inserted.

But the living mind is not uprooted in this way. Thoughts that grow and are alive are always about something in the world, even if that something is a potential future effect. Part of the generality of thought—its thirdness—is that it is not just located in a single stable self. Rather, it is constitutive of an emerging one distributed over multiple bodies:

Man is not whole as long as he is single[:]. . . he is essentially a possible member of society. Especially, one man's experience is nothing, if it stands alone. If he sees what others cannot, we call it hallucination. It is not "my" experience, but "our" experience that has to be thought of; and this "us" has indefinite possibilities. (Peirce CP 5.402)

This "us" is a general.

And panic disrupts this general. With panic there is a collapse of the triadic relation linking my habit-making mind to other habit-making minds *vis-à-vis* our ability to share the experience of the habits of the world that we discover.

The solipsistic enfolding of an increasingly private mind onto itself results in something terrifying: the implosion of the self. In panic the self becomes a monadic "first" severed from the rest of the world; a "possible member of society" whose only capability is to doubt the existence of any of what Haraway (2003) calls its more "fleshly" connections to the world. The result, in sum, is a skeptical Cartesian *cogito*: a fixed "I (only) think (symbolically) therefore I (doubt that I) am" instead of a growing, hopeful, and emergent "us" with all its "indefinite possibilities."²⁶

This triadic alignment that results in an emergent "us" is achieved indexically and iconically. Consider Lucio's running commentary after he shot the woolly monkey that had been scared out of her treetop perch by the palm tree that Hilario felled:

there
 right there
 there
 what's gonna happen?
 there, it's curled up in a ball
 all wounded!²⁷

Hilario, whose eyesight is not as good as Lucio's, wasn't immediately able to see the monkey up in the tree. Whispering, he asked his son, "Where?" And as the monkey suddenly began to move Lucio rapidly responded, "Look! look! look! look!"

The imperative "look!" (Quichua "*ricuti!*") functions here as an index to orient Hilario's gaze along the path of the monkey's movement across the length of the branch. As such it aligns Hilario and Lucio vis-à-vis the monkey in the tree. In addition, Lucio's rhythmic repetition of the imperative iconically captures the pace of the monkey's movement along the branch. Through this image that Hilario can also come to share, Lucio can "directly communicate" his experience of seeing the wounded monkey moving through the canopy, regardless of whether his father actually managed to see her.

It is precisely this sort of iconic and indexical alignment that brought me back into the world the moment that tanager came into focus in my binoculars. That crisp image of the bird sitting right there in those shrubs grounded me again in a shareable real. This is so even though icons and indices do not provide us with any immediate purchase on the world. All signs involve mediation, and all of our experiences are semiotically mediated. There is no

bodily, inner, or other kind of experience or thought that is unmediated (see Peirce CP 8.332). Furthermore, there is nothing intrinsically objective about this real tanager feeding on a real riverbank plant. For this animal and its shrubby perch—like me—are semiotic creatures through and through. They are the results of representation. They are outcomes of an evolutionary process of ever-increasing alignment with those proliferating webs of habits that constitute tropical life. Such habits are real, regardless of whether or not I can appreciate them. By acquiring a feel for some of these habits, as I did with that tanager on the river's edge that morning, I can potentially become aligned with a broader "us" thanks to the way others can share this experience with me.

Like our thoughts and minds, birds and plants are emergent reals. Life-forms, as they represent and amplify the habits of the world, create new habits, and their interactions with other organisms create even more habits. Life, then, proliferates habits. Tropical forests, with their high biomass, unparalleled species diversity, and intricate coevolutionary interactions, exhibit this tendency toward habit taking to an unusual degree. For people like the Ávila Runa, who are intimately involved with the forest through hunting and other subsistence activities, being able to predict these habits is of the utmost importance.

So much of what draws me to the Amazon is the ways in which one kind of third (the habits of the world) are represented by another kind of third (the human and nonhuman semiotic selves who live in and constitute this world) in such a way that more kinds of thirds can "flourish" (see Haraway 2008). Life proliferates habits. Tropical life amplifies this to an extreme, and the Runa and others who are immersed in this biological world can amplify this even further.

GROWTH

Being alive—being in the flow of life—involves aligning ourselves with an ever-increasing array of emerging habits. But being alive is more than being in habit. The lively flourishing of that semiotic dynamic whose source and outcome is what I call *self* is also a product of disruption and shock. As opposed to inanimate matter, which Peirce characterized as "mind whose habits have become fixed so as to lose the powers of forming them and losing them," mind (or *self*) "has acquired in a remarkable degree a habit of taking and laying aside habits" (CP 6.101).

This habit of selectively discarding certain other habits results in the emergence of higher-order habits. In other words, growth requires learning something about the habits around us, and yet this often involves a disruption of our habituated expectations of what the world is like. When the pig that Maxi shot plunged—*tsupu*—into the river, as wounded pigs are known to do, Maxi assumed that he had gotten his quarry. He was wrong:

foolishly, "it's gonna die," I'm thinking
when
it suddenly ran off²⁴

Maxi's feeling of bewilderment occasioned by the supposedly dead peccary suddenly jumping up and running off reveals something of what Haraway (1999: 184) calls "a sense of the world's independent sense of humor." And it is in such moments of "shock" that the habits of the world make themselves manifest. That is, we don't usually notice the habits we in-habit. It is only when the world's habits clash with our expectations that the world in its otherness, and its existent actuality as something other than what we currently are, is revealed. The challenge that follows this disruption is to grow. The challenge is to create a new habit that will encompass this foreign habit and, in the process, to remake ourselves, however momentarily, anew, as one with the world around us.

Living in and from the tropical forest requires an ability to make sense of the many layers of its habits. This is sometimes accomplished by recognizing those elements that appear to disrupt them. On another walk in the forest with Itilario and his son Lucio we came across a small bird of prey, known in English as the hook-billed kite,²⁹ perched in the branches of a small tree. Lucio shot at it but missed. Frightened, the bird flew off in a strange manner. Rather than fly rapidly through the understory, as raptors are expected to do, it lumbered off quite slowly. As he pointed in the direction in which it went Lucio remarked:

it just went off slowly
tea tea tea tea
there³⁰

Tea tea tea tea. Throughout the day Lucio repeated this sonic image of wings flapping slowly, hesitantly, and somewhat awkwardly.³¹ The kite's cumbersome flight caught Lucio's attention. It disrupted the expectation that

raptors should exhibit swift and powerful flight. Similarly the ornithologists Hilty and Brown (1986: 91) describe the hook-billed kite as having unusually "broad lanky wings" and being "rather sedentary and sluggish." Compared to other raptors that exhibit swifter flight, this bird is anomalous. It disrupts our assumptions about raptors, and this is why its habits are interesting.

Another example: upon returning home one morning from a hunt Hilario pulled out from his net bag an epiphytic cactus (*Discocactus amazonicus*) dotted with purple flowers. He called it *viñarina panga* or *viñari panga*, because, as he explained, "*pangamanda viñarin*," "it grows out of its leaves." It has no particular use, although, like other succulent epiphytes such as orchids, he thought that the macerated stem might make a good poultice to apply to cuts. But because the leaves of this plant appear to grow out of other leaves, Hilario found this plant strange. The name "*viñari panga*" gets at a botanical habit that extends deep into the evolutionary past. Leaves do not grow out of other leaves. They can only grow out of the meristematic tissue located in buds on twigs, stems, and branches. The ancestral group within the cacti, from which *D. amazonicus* is derived, originally lost its laminar photosynthetic leaves and developed succulent rounded photosynthetic stems. Those flattened green structures that grow out of each other in *D. amazonicus* are therefore not true leaves. They are actually stems that function as leaves and for this reason they can grow out of each other. These leaflike stems appear to put into question the habit that leaves sprout from stems. This is what makes them interesting.

WHOLES PRECEDE PARTS

In semiosis, as in biology, wholes precede parts; similarity precedes difference (see Bateson 2002: 159). Thoughts and lives both begin as wholes—albeit ones that can be extremely vague and underspecified. A single-celled embryo, however simple and undifferentiated, is just as whole as the multicellular organism into which it will develop. An icon, however rudimentary its likeness, insofar as it is taken as a likeness, imperfectly captures the object of its similarity as a whole. It is only in the realm of the machine that the differentiated part comes first and the assembled whole second.¹² Semiosis and life, by contrast, begin whole.

An image, then, is a semiotic whole, but as such it can be a very rough approximation of the habits it represents. One afternoon while drinking manic beer at Ascencio's house we heard Sandra, Ascencio's daughter, cry out

from her garden some way off, "A snake! Come kill it!"¹³ Ascencio's son Oswaldo rushed out, and I followed close behind. Although the creature in question turned out to be an inoffensive whipsnake,¹⁴ Oswaldo killed it anyway with a blow from the broad side of his machete and then severed and buried its head.¹⁵ As we walked back to the house Oswaldo pointed out a little stump that I had just stumbled on and noted that he had seen me stumble on the very same stump the day before on our return along that path after a long day out hunting with his father and brother-in-law in the steep forested slopes west of Ávila.

On those walks with Oswaldo back to the house my ambulatory habits had only imperfectly matched the habits of the world. Because of fatigue or mild inebriation (the first time I had stumbled on that stump we had hiked more than ten hours over very steep terrain and I was exhausted, the second time I had just finished off several big bowls of manioc beer) I simply failed to interpret some of the features of the path as salient. I acted as if there were no obstacles. I could get away with this because my regular gait was an interpretive habit—an image of the path—that was good enough for the challenge at hand. Given the conditions that we faced it didn't really matter if the way I walked didn't perfectly match the features of the path. If, however, we had been running, or if I had been burdened by a heavy load, or if it had been raining heavily, or if I had been a little bit more tipsy, that lack of fit may well have become amplified, and instead of slightly stumbling I might well have tripped and fallen.

My tipsy or fatigued representation of the forest path was so rudimentary that I failed to notice its differences. Until Oswaldo pointed it out to me I never noticed the stump, or that I had stumbled on it—twice! My stumbling had become its own fixed habit. By virtue of the regularity my imperfect walking habit had assumed—so regular that I could repeatedly kick the same stump on successive days—it became visible to Oswaldo as its own anomalous habit. And yet, however imperfect its match to the path, my manner of walking was good enough. It got me home.

But there was something lost in that "good enough" habituated automatization. Perhaps that day walking back to Ascencio's house, I had become, for a moment, more like matter—"mind whose habits had become fixed"—and less a learning and yearning, living and growing self.

Unexpected events, such as the sudden appearance of a stump across our path—when we manage to notice it—or Maxi's peccary suddenly reviving can

disrupt our assumptions of how the world is. And it is this very disruption, the breakdown of old habits and the rebuilding of new ones, that constitutes our feeling of being alive and in the world. The world is revealed to us, not by the fact that we come to have habits, but in the moments when, forced to abandon our old habits, we come to take up new ones. This is where we can catch glimpses—however mediated—of the emergent real to which we also contribute.

THE OPEN WHOLE

Recognizing how *semiosis* is something broader than the symbolic can allow us to see the ways we come to inhabit an ever-emerging world beyond the human. An anthropology beyond the human aims to reach beyond the confines of that one habit—the symbolic—that makes us the exceptional kinds of beings that we believe we are. The goal is not to minimize the unique effects this habit has but only to show some of the different ways in which the whole that is the symbolic is open to those many other habits that can and do proliferate in the world that extends beyond us. The goal, in short, is to regain a sense of the ways in which we are open wholes.

This world beyond the human, to which we are open, is more than something “out there” because the real is more than that which exists. Accordingly, an anthropology beyond the human seeks a slight displacement of our temporal focus to look beyond the here and now of actuality. It must, of course, look back to constraints, contingencies, contexts, and conditions of possibility. But the lives of signs, and of the selves that come to interpret them, are not just located in the present, or in the past. They partake in a mode of being that extends into the future possible as well. Accordingly, this anthropology beyond the human aims to attend to the prospective reality of these sorts of generals as well as to their eventual effects in a future present.

If our subject, the human, is an open whole, so too should be our method. The particular semiotic properties that make humans open to the world beyond the human are the same ones that can allow anthropology to explore this with ethnographic and analytical precision. The realm of the symbolic is an open whole because it is sustained by, and ultimately cashed out in, a broader, different kind of whole. That broader whole is an image. As Marilyn Serathern once said to me, paraphrasing Roy Wagner, “You can’t have half an image.” The symbolic is one particular human-specific way to come to feel an

image. All thought begins and ends with an image. All thoughts are wholes, however long the paths that will bring them there may be.³⁶

This anthropology, like semiosis and life, does not start with difference, otherness, or incommensurability. Nor does it start with intrinsic likeness. It begins with the likeness of thought-at-rest—the likeness of not yet noticing those eventual differences that might come to disrupt it. Likenesses, such as *tsupu*, are special kinds of open wholes. An icon is, on the one hand, monadic, closed unto itself, regardless of anything else. It is like its object whether or not that object exists. I feel *tsupu* whether or not you do. And yet, insofar as it stands for something else, it is an opening as well. An icon has the “capacity of revealing unexpected truth”: “by direct observation of it other truths concerning its object can be discovered” (Peirce CP 2.279). Peirce’s example is an algebraic formula: because the terms to the left of the equals sign are iconic of those to the right we can learn something more about the latter by considering the former. That which is to the left is a whole. It captures that which is to its right in its totality. And yet in the process it is also able to suggest, “in a very precise way, new aspects of supposed states of things” (CP 2.281). This is possible, thanks to the general way it stands for this totality. Signs stand for objects “not in all respects but in reference to a sort of idea” (CP 2.228). This idea, however vague, is a whole.

Attending to the revelatory power of images suggests a way to practice an anthropology that can relate ethnographic particulars to something broader. The inordinate emphasis on iconicity in lowland Quichua amplifies and makes apparent certain general properties of language and the relation that language has to that which lies beyond it, just as panic exaggerates and therefore makes apparent other properties. These amplifications or exaggerations can function as images that can reveal something general about their objects. Such generals are real despite the fact that they lack the concreteness of the specific or the fixed normativity of those putative universals that anthropology rightly rejects. It is to such general reals that an anthropology beyond the human can gesture. It does so, however, in a particularly worldly way. It grounds itself in the mundane strivings and stumblings that emerge in the ethnographic moment, with a view to how such contingent everyday make apparent something about general problems.

My hope is that this anthropology can open itself to some of the new and unexpected habits just coming into being that might catch it up. By opening itself to novelty, images, and feelings, it seeks the freshness of firstness in its

subject and method. I ask you to feel *tsupu* for yourself, and this is something I cannot force upon you. But it is also an anthropology of secondness in that it hopes to register how it is surprised by the effects of such spontaneities as they come to make a difference in a messy world that is the emergent product of all the ways in which its motley inhabitants engage with and attempt to make sense of each other. Finally, this is an anthropology of the general, for it aims to recognize those opportunities where an *us* that exceeds the limits of individual bodies, species, and even concrete existence can come to extend beyond the present. This *us*—and the hopeful worlds it beckons us to imagine and realize—is an open whole.



must have confused a mountain lion with a red brocket deer. Both have tawny coats and are approximately the same size. Luisa tried to imagine what they were thinking: "It looks like a deer, let's bite it!"

Delia concisely summed up their frustration with the dogs' confusion: "So so stupid." América elaborated: "How is it that they didn't know? How is it that they could even think [of barking], 'yau yau yau,' as if they were going to attack it?"

What each bark meant was clear, for these barks are part of an exhaustive lexicon of canine vocalizations that people in Ávila feel they know. What was less obvious was what, from the dogs' perspectives, prompted them to bark in those ways. To imagine that the dogs might fail to discriminate between a mountain lion and a deer and to trace out the tragic consequences of that confusion—the dogs just saw something big and tawny and attacked it—required thinking beyond what in particular the dogs did, to how it was that what they did was motivated by how they came to understand the world around them. The conversation began to revolve around the question of how dogs think.

This chapter develops the claim that all living beings, and not just humans, think, and explores another closely related claim, that all thoughts are alive. It is about "the living thought."³ What does it mean to think? What does it mean to be alive? Why are these two questions related, and how does our approach to them, especially when seen in terms of the challenges of relating to other kinds of beings, change our understanding of relationality and "the human"?

If thoughts are alive and if that which lives thinks, then perhaps the living world is enchanted. What I mean is that the world beyond the human is not a meaningless one made meaningful by humans.⁴ Rather, mean-ings—means-ends relations, strivings, purposes, telos, intentions, functions and significance—emerge in a world of living thoughts beyond the human in ways that are not fully exhausted by our all-too-human attempts to define and control these.⁵ More precisely, the forests around Ávila are animate. That is, these forests house other emergent loci of mean-ings, ones that do not necessarily revolve around, or originate from, humans. This is what I'm getting at when I say that forests think. It is to an examination of such thoughts that this anthropology beyond the human now turns.

If thoughts exist beyond the human, then we humans are not the only selves in this world. We, in short, are not the only kinds of we. Animism, the attribution of enchantment to these other-than-human loci, is more than a

belief, an embodied practice, or a foil for our critiques of Western mechanistic representations of nature, although it is also all of these as well. We should not, then, just ask how some humans come to represent other beings or entities as animate; we also need to consider more broadly what is it about these that make them animate.

People in Ávila, if they are to successfully penetrate the relational logics that create, connect, and sustain the beings of the forest, must in some way recognize this basic animacy. Runa animism, then, is a way of attending to living thoughts in the world that amplifies and reveals important properties of lives and thoughts. It is a form of thinking about the world that grows out of a specially situated intimate engagement with thoughts-in-the-world in ways that make some of their distinctive attributes visible. Paying attention to these engagements with the living thoughts of the world can help us think anthropology differently. It can help us imagine a set of conceptual tools we can use to attend to the ways in which our lives are shaped by how we live in a world that extends beyond the human.

Dogs, for example, are selves because they think. Counterintuitively, however, proof that they think is that they, in Delia's words, can be "so so stupid"—so indifferent, so dumb. That the dogs in the forest were considered capable of confusing a mountain lion with a deer suggests an important question: How is it that indifference, confusion, and forgetting are so central to the lives of thoughts and the selves that come to house them? The strange and productive power of confusion in the living thought challenges some of our basic assumptions about the roles that difference and otherness, on the one hand, and identity, on the other, play in social theory. This can help us rethink relationality in ways that can take us beyond our tendency to apply our assumptions about the logic of linguistic relationality to all the many possible ways in which selves might relate.

NONHUMAN SELVES

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NONHUMAN SELVES

The women certainly felt they were able to interpret the dogs' barks, but that's not what makes them recognize their dogs as selves. What makes their dogs selves is that their barks were manifestations of their interpretations of the world around them. And how those dogs interpreted the world around them, as the women were amply aware, matters vitally. We humans, then, are not the only ones who interpret the world. "Aboutness"—representation, intention,

and purpose in their most basic forms—is an intrinsic structuring feature of living dynamics in the biological world. Life is inherently semiotic.⁶

This intrinsically semiotic characteristic applies to all biological processes. Take for example the following evolutionary adaptation: the elongated snout and tongue of the giant anteater. The giant anteater, or *tamanubua*, as it is known in Ávila, can be deadly if cornered. One Ávila man was almost killed by one during my time there (see chapter 6), and even jaguars are said to keep well away from them (see chapter 3). The giant anteater is also ethereal. I caught a fleeting glimpse of one off in the distance in the forest as Hilario, Lucio, and I were resting on a log on a ridge above the Suno River late one afternoon. Its image still impresses itself on me today: the silhouette of a tapered head, a stocky body, and an enormous splayed fan of a tail around whose hairs the late afternoon sun's rays passed.

Giant anteaters feed exclusively on ants. They do so by inserting their elongated snouts into ant colony tunnels. The specific shape of the anteater's snout and tongue captures certain features of its environment, namely, the shape of ant tunnels. This evolutionary adaptation is a sign to the extent that it is interpreted (in a very bodily way, for there is no consciousness or reflection here) by a subsequent generation with respect to what this sign is about (i.e., the shape of ant tunnels). This interpretation, in turn, is manifested in the development of the subsequent organism's body in a way that incorporates these adaptations. This body (with its adaptations) functions as a new sign representing these features of the environment, insofar as it, in turn, will be interpreted as such by another subsequent generation of anteaters in the eventual development of that generation's body.

Anteater snouts over the generations have come to represent with increasing accuracy something about the geometry of ant colonies because those lineages of "protoanteaters" whose snouts and tongues less accurately captured relevant environmental features (e.g., the shapes of ant tunnels) did not survive as well. Relative to these protoanteaters, then, today's living anteaters have come to exhibit comparatively increasing "fittedness" (Deacon 2012) to these environmental features. They are more nuanced and exhaustive representations of it.⁷ It is in this sense that the logic of evolutionary adaptation is a semiotic one.

Life, then, is a sign process. Any dynamic in which "something . . . stands to somebody, for something in some respect or capacity," as Peirce's (CP 2.228) definition of a sign has it, would be alive. Elongated snouts and tongues *stand*

to a future anteater (a “somebody”) for something about the architecture of an ant colony. One of Peirce’s most important contributions to semiotics is to look beyond the classical dyadic understanding of signs as something that stands for something else. Instead, he insisted, we should recognize a crucial third variable as an irreducible component of semiosis: signs stand for something in relation to a “somebody” (Colapietro 1989: 4). As the giant anteater illustrates, this “somebody”—or a self, as I prefer to call it—is not necessarily human, and it need not involve symbolic reference, subjectivity, the sense of interiority, consciousness, or the awareness we often associate with representation for it to count as such (see Deacon 2012: 465–66).

Furthermore, selfhood is not limited just to animals with brains. Plants are also selves. Nor is it coterminous with a physically bounded organism. That is, selfhood can be distributed over bodies (a seminar, a crowd, or an ant colony can act as a self), or it can be one of many other selves within a body (individual cells have a kind of minimal selfhood).

Self is both the origin and the product of an interpretive process; it is a waypoint in semiosis (see chapter 1). A self does not stand outside the semiotic dynamic as “Nature,” evolution, watchmaker, homuncular vital spirit, or (human) observer. Rather, selfhood emerges from within this semiotic dynamic as the outcome of a process that produces a new sign that interprets a prior one. It is for this reason that it is appropriate to consider nonhuman organisms as selves and biotic life as a sign process, albeit one that is often highly embodied and nonsymbolic.

MEMORY AND ABSENCE

The giant anteater as a self is a form that selectively “remembers” its own form. That is, a subsequent generation is a likeness of a previous one. It is an iconic representation of its ancestor. But at the same time as such an anteater is a likeness of its forebear (and is thus a sort of memory of it) it also differs from it. For this anteater, with its snout and tongue, can potentially be a relatively more detailed representation of the world around it, insofar (in this case) as its snout, when compared to that of its ancestor, better fits ant tunnels. In sum, the way this anteater remembers or re-presents the generations that came before it is “selective.” This is so, in part, thanks to those past protoanteater selves whose snouts didn’t “fit” their environments as well and who were thus, in a sense, forgotten.

This play of remembering and forgetting is both unique and central to life; any lineage of living organism—plant or animal—will exhibit this characteristic. Contrast this with, say, a snowflake. Although the particular form that a given snowflake takes is a historically contingent product of the interaction with its environment as it falls to the ground (and this is why we think of snowflakes as exhibiting a sort of individuality; no two are alike) the particular form a snowflake takes is never selectively remembered. That is, once it melts its form will have no bearing on the form that any subsequent snowflake will take as it begins to fall to the ground.

Living beings differ from snowflakes because life is intrinsically semiotic, and semiosis is always for a self. The form an individual anteater takes comes to represent, for a future instantiation of itself, the environment its lineage has come to fit over evolutionary time. Anteater lineages selectively remember their previous fits to their environments; snowflakes don't.

A self, then, is the outcome of a process, unique to life, of maintaining and perpetuating an individual form, a form that, as it is iterated over the generations, grows to fit the world around it at the same time that it comes to exhibit a certain circular closure that allows it to maintain its selfsame identity, which is forged with respect to that which it is not (Deacon 2012: 471); anteaters re-present previous representations of ant tunnels in their lineage, but they are not themselves ant tunnels. Insofar as it strives to maintain its form, such a self acts for itself. A self, then, whether "skin-bound" or more distributed, is the locus of what we can call agency (479–80).

Because a giant anteater is a sign, what it is—its particular configuration, the fact, for example, that it has an elongated, as opposed to some other shape of snout—cannot be understood without considering what it is about, namely, the relevant environment that it increasingly comes to fit through the dynamic I've just described. Therefore, although semiosis is embodied, it also always involves something more than bodies. It is about something absent: a semiotically mediated future environment, which is potentially like the environment to which the past generation fit (see chapter 1).

A living sign is a prediction of what Peirce calls a habit (see chapter 1). That is, it is an expectation of a regularity, something that has not yet come to exist but will likely come to be. Snouts are products of what they are not, namely, the possibility that there will be ant tunnels in the environment into which the snouted anteater will come to live. They are the products of an expectation—of a highly embodied "guess" at what the future will hold.

This is a result of another important absence. As I mentioned earlier, the snouts and the way they fit with the world around them are the result of all the previous wrong “guesses”—the previous generations whose snouts were less like that world of ant tunnels. Because the snouts of these protoantaters didn’t fit the geometry of ant tunnels quite as well as the snouts of others, their forms did not survive into the future.

This way in which selves strive to predict “absent” futures also manifests itself in the purported behavior of América’s dogs. The dogs must have barked, the women imagined, at what they expected and trusted was a deer. More accurately, perhaps, they barked at something they saw as big and tawny. Unfortunately, however, mountain lions are also big and tawny. A semiotically mediated future—the possibility of attacking the perceived deer—came to affect the present. It influenced the dogs’ decision—“so stupid” in hindsight—to chase the creature they thought was prey.

LIFE AND THOUGHT

A lineage of signs can potentially extend into the future as an emergent habit, insofar as each instantiation will interpret the previous one in a way that can, in turn, be interpreted by a future one. This applies equally to a biological organism, whose progeny may or may not survive into the future, as it does to this book, whose ideas may or may not be taken up in the thinking of a future reader (see Peirce CP 7.591). Such a process is what constitutes life. That is, any kind of life, be it human, biological, or even, someday, inorganic, will spontaneously exhibit this embodied, localized, representational, future-predicting dynamic that captures, amplifies, and proliferates the tendency toward habit taking in a future instantiation of itself. Another way of saying this is that any entity that stands as a locus of aboutness, within a lineage of such loci that can potentially extend into the future, can be said to be alive. The origins of life—any kind of life, anywhere in the universe—also necessarily marks the origins of semiosis and of self.

It also marks the origins of thought. Life-forms—human and nonhuman alike—because they are intrinsically semiotic, exhibit what Peirce calls a “scientific” intelligence.” By “scientific,” he does not mean an intelligence that is human, conscious, or even rational but simply one that is “capable of learning by experience” (CP 3.227). Selves, as opposed to snowflakes, can learn by experience, which is another way of saying that, through the semiotic process I’ve

been describing, they can grow. And this, in turn, is another way of saying that selves think. Such thinking need not happen in the time scale we chauvinistically call real time (see Dennett 1996: 61). It need not happen, that is, within the life of a single skin-bound organism. Biological lineages also think. They too, over the generations, can grow to learn by experience about the world around them, and as such they too demonstrate a "scientific" intelligence." In sum, because life is semiotic and semiosis is alive, it makes sense to treat both lives and thoughts as "living thoughts." This deepened understanding of the close relationship between life, self, and thought is central to this anthropology beyond the human that I am developing here.

AN ECOLOGY OF SELVES

The semiotic quality of life—the fact that the forms that life takes are the product of how living selves represent the world around them—structures the tropical ecosystem. Although all life is semiotic, this semiotic quality is amplified and made more apparent in the tropical forest, with its unparalleled kinds and quantities of living selves. This is why I want to find ways to attend to how forests think; tropical forests amplify, and thus can make more apparent to us, the ways life thinks.

The worlds that selves represent are not just made up of things. They are also, in large part, made up of other semiotic selves. For this reason I have come to refer to the web of living thoughts in and around the forests of Ávila as an ecology of selves. This ecology of selves in and around Ávila includes the Runa as well as other humans who interact with them and the forest, and it holds in its configurations not only the many kinds of living beings of the forest but also, as I discuss toward the end of this book, the spirits and the dead that make us the living beings that we are.

How different kinds of beings represent and are represented by other kinds of beings defines the patterning of life in the forests around Ávila. For example, once a year the colonies of leafcutter ants (*Atta* spp.)—whose presence is normally visible only in the long files of workers carrying to their nests snip-pets of vegetation they have culled from treetops—change their activity. Over the space of a few minutes, each widely dispersed colony simultaneously disgorges hundreds upon hundreds of plump winged reproductive ants and sends them flying into the early morning sky to mate with those from other colonies. This event poses, and indeed is structured by, a variety of challenges

and opportunities. How do the ants, living in far-flung colonies, manage to coordinate their flights? How can predators tap into this rich but ephemeral cache? And what strategies do the ants use to avoid being eaten? These flying ants, overburdened with fat reserves, are a savory delicacy that people in Ávila, as well as many others who live in the Amazon, covet. Indicative of how much they are valued, they are known simply as *añangu*, ants. Toasted with salt they are a delicacy, and collected by the potful they are an important food source during the limited time they are available. How do people manage to predict the few minutes in each year when these will come out of their underground nests?

The problem of when the ants fly can tell us something about how the rain forest comes to be what it is: an emergent and expanding multilayered cacophonous web of mutually constitutive, living, and growing thoughts. Because in this part of the equatorial tropics there are no marked seasonal changes in sunlight or temperature, and no corresponding spring bloom, there is no one stable cue external to the interactions among forest beings that determines or predicts when ants will fly. The timing of this event is a product of the coordinated prediction of seasonal meteorological regularities as well as an orchestration among different, competing, and interpreting species.

According to people in Ávila the winged ants emerge in the calm that follows a period of heavy rains that includes thunder and lightning and the flooding of rivers. This stormy period brings to a close a relatively drier period that usually occurs around August. People try to predict the emergence of the ants by linking it to a variety of ecological signs associated with fruiting regimes, increases in insect populations, and changes in animal activity.⁸ When the various indicators point to the fact that "ant season" (*añangu uras*) is at hand, people go to the various nests around their houses several times throughout the night to check for the telltale signs that the ants will soon take flight. These signs include the presence of guards clearing entrances of debris and sightings of a few slowly emerging and still somewhat lethargic winged ants.

People in Ávila are not the only ones interested in when these ants will fly. Other creatures, such as frogs, snakes, and small felines,⁹ are attracted to the ants, as well as to those other animals that are attracted to the ants. They all watch the ants and watch those watching the ants for signs of when the ants will emerge from their nests.

Although the day of the flight is closely linked to meteorological patterns, and this seems to be how the ants coordinate their flights with those from other

nests, the precise moment at which the flight will take place on that day is a response, sedimented over evolutionary time, to what it is that potential predators might, or might not, notice. It is no accident that the ants take flight just before daybreak (at exactly 5:10, when I've been able to time it). When they are in their nests the aggressive guards of the colony protect them from snakes, frogs, and other predators. Once they take flight, however, they are on their own, and they can fall prey to the lingering fruit-eating bats still out at twilight who attack them in midflight by biting off their greatly enlarged, fat-filled abdomens.

How bats see the world matters vitally to the flying ants. It is no accident that the ants take flight at the time they do. Although some lingering bats are still out, by this time they will only be active for twenty or thirty minutes longer. When the birds come out (not long after a six o'clock sunrise) most of the ants will have already dispersed, and some females will have already copulated and fallen to the ground to establish new colonies. The precise timing of the ant flight is an outcome of a semiotically structured ecology. The ants emerge at twilight—that blurry zone between night and day—when nocturnal and diurnal predators are least likely to notice them.

People attempt to enter some of the logic of the semiotic network that structures ant life in order to capture the ants during those few minutes in the year when they fly out of their nests. One night, as the ants were about to fly, Juanicu asked me for a cigarette so that he could blow tobacco smoke infused with the power of his "life breath" (*samai*) in order to send the impending rain clouds away. If it rained that evening the ants would not emerge. His wife, Olga, however, urged him not to ward off the rain clouds. She feared that their sons, who had gone to market in Loreto, would not return from town until the following day. They would be needed to harvest the ants that would be pouring out of the various nests around the house. To make sure the ants would not fly that night, she went out to all the nearby nests and stomped on them. This, she said, would keep the ants from coming out that evening.

On the night that Juanicu felt sure the ants would finally fly, he urged me, before I went out with his children in the middle of the night to check the nests, not to kick or step heavily around the nest. Then, shortly before five in the morning, at a distance of about four meters from the entrance of the nest closest to the house, Juanicu and I placed some lit kerosene lanterns as well as some of my candles and my flashlight. The winged ants are attracted to light and would be drawn to these sources. The lights were placed far enough away, however, so that the guards would not consider them threatening.

As the ants began to emerge Juanico spoke only in whispers. Shortly after five o'clock we could hear a buzzing as the winged ants began to come out from the nest and fly off. Many of these were attracted by the light and came to us instead of flying to the sky. Juanico then began to whistle like a siren alternating between two different pitches. This, he later explained, is something the flying ants understand as the call of their "mothers."¹⁰ As the ants came to us, we singed off their wings with torches made of dry *lisan* leaves.¹¹ We were then easily able to place them into covered pots.¹²

The leafcutter ants are immersed in an ecology of selves that has shaped their very being; that they emerge just before dawn is an effect of the interpretive propensities of their major predators. People in Ávila also attempt to tap into the communicative universe of the ants and of the many creatures connected to them. Such a strategy has practical effects; people are able to gather vast quantities of ants based on them.

By treating ants as the intentional communicating selves they are, Juanico was able to arrive at an understanding of the various associations that link ants to the other beings in the forest—an understanding that is surely never absolute but sufficient to accurately predict the few moments in the year when these ants will fly. He was also able to communicate directly with them, calling them to their deaths. In doing so he was, in effect, entering the logic of how forests think. This is possible because his (and our) thoughts are in important respects like those that structure the relations among those living thoughts that make the forest what it is: a dense, flourishing, ecology of selves.

SEMIOTIC DENSITY

The interrelations among so many different semiotic life-forms in this dense ecology of selves result in a relatively more nuanced and exhaustive overall representation of the surrounding environment when compared to the way life represents elsewhere on the planet. That is, the "thoughts" of a tropical forest come to represent the world in a relatively more detailed way. For example, a number of tropical tree species have evolved as specialists that grow only on white-sand soils. Tropical white-sand soils, as contrasted to tropical clay soils, are nutrient-poor, do not hold water well, and have characteristics such as high acidity that can slow plant growth. However, it is not the soil conditions in themselves that account for the fact that there are specialists that live on

white-sand soils. Rather, the fact that there are such specialists is the result of their relation to another set of life-forms: plant-eating organisms, or herbivores (Marquis 2004: 619).

Because of the extremely poor conditions of these white-sand soils, plants have difficulty repairing themselves fast enough to sustain the levels of nutrient loss incurred by herbivory. Thus there is great selective pressure for plants living on such nutrient-poor soils to develop highly specialized toxic compounds and other defenses against herbivory (Marquis 2004: 620).

Interestingly, however, soil differences do not directly affect what kinds of plants can grow where. Fine, Mesones, and Coley (2004) have shown that when herbivores are experimentally removed from poor-soil plots and rich-soil species experimentally transplanted in the rich-soil species actually grow better than those adapted to poor soils.

So one could say that tropical plants come to represent something about their soil environments by virtue of their interactions with the herbivores that amplify the differences in soil conditions and thus make these differences important to plants. That is, differences in soil types wouldn't make a difference to the plants if it weren't for these other life-forms. This is why rich-soil plants, not burdened by the need to produce energetically costly toxins, grow better than poor-soil plants in poor-soil plots that have been kept free of herbivores experimentally.¹³

In temperate regions, where insectivorous herbivores are far fewer, there is very little specialization of plants to soil type even in areas where soil heterogeneity (i.e., the juxtaposition of nutrient rich and poor soils) is higher than in tropical regions (Fine 2004: 2). Another way to say this is that plants in the tropics, as opposed to those in temperate regions, come to form relatively more nuanced representations of the characteristics of their environments. They make more differentiations among soil types because of the ways they are caught up in a relatively denser web of living thoughts.

This herbivore-dependent amplification effect of soil differences does not stop with plants but continues to propagate through the ecology of selves. Tannin, for example, is a chemical defense that many Amazonian poor-soil plants have developed against herbivores. Because microorganisms cannot easily break down tannin-rich leaf litter, this compound leaches into rivers where it is toxic to fish and many other organisms. As a consequence, ecosystems associated with rivers that drain large expanses of white-sand soil are not able to support as much animal life (Janzen 1974), and historically this has had

an important impact on humans living in the Amazon (Moran 1993). The various forms that all these ecologically related kinds of life take are not reducible to the characteristics of soil. I'm not making an argument for environmental determinism.¹⁴ And yet this multispecies assemblage captures and amplifies something about the differences in soil conditions precisely as a function of the greater number of relations (relative to other ecosystems) among kinds of selves that exist in this ecology of selves.

RELATIONALITY

Selves, in short, are thoughts, and the modes by which such selves relate to one another stem from their constitutively semiotic nature and the particular associational logics this entails. Considering the logic by which these selves relate in this ecology of selves challenges us to rethink relationality—arguably our field's fundamental concern and central analytic (Strathern 1995).

If selves are thoughts and the logic through which they interact is semiotic, then relation is representation. That is, the logic that structures relations among selves is the same as that which structures relations among signs. This, in itself, is not a new idea. Whether or not we are explicit about it we already tend to think of relationality in terms of representation in the ways we theorize society and culture. But we do so based on our assumptions about how human symbolic representation works (see chapter 1). Like the words that exist in the conventional relational configurations that make up a language, the *relata*—be these ideas, roles, or institutions—that make up a culture or a society, do not precede the mutually constitutive relationships these *relata* have with one another in a system that necessarily comes to exhibit a certain closure by virtue of this fact.

Even posthuman relational concepts, such as Bruno Latour's "actant," the networks of actor-network theory, and Haraway's "constitutive intra-action" (Haraway 2008: 32, 33), rely on assumptions about relationality that stem from the special kinds of relational properties we find in human language. In fact, in some versions of actor-network theory the relational networks that connect humans and nonhuman entities are explicitly described as language-like (see Law and Mol 2008: 58).¹⁵

But representation, as I have been arguing, is something both broader than and different from what we expect given how our thinking about it has been linguistically colonized. Extending linguistic relationality to nonhumans

narcissistically projects the human onto that which lies beyond it. And along with language comes a host of assumptions about systematicity, context, and difference, which stem from some of the distinctive properties of human symbolic reference and are not necessarily relevant to how living thoughts might more generally relate. In the process, other properties that might permit a more capacious view of relationality are obscured. My claim, in short, is that an anthropology beyond the human can rethink relationality by seeing it as semiotic but not always and necessarily languagelike.

Consider, in this regard, the relation between a wood tick and the mammals it parasitizes, a relation made classic by the early-twentieth-century ethologist Jakob von Uexküll (1982). Ticks, according to von Uexküll, perceive mammals, whose blood they suck, from the smell of butyric acid, warmth, and the ability to detect the bare patches of mammalian skin where they can burrow. According to him, their experiential world, or *umwelt* as he called it, is limited to just these three parameters (Uexküll 1982: 57, 72). For von Uexküll, and many of those who have picked up on his work, the ticks' experiential world is closed and "poor," in the sense that the tick doesn't differentiate among many entities (see Agamben 2004). But I want to emphasize the productive power of this simplification that is central to living thoughts and to the relations that emerge among the selves that are the products of living thoughts. And I want to highlight the fact that its relational logic is semiotic but not distinctively symbolic.

Ticks do not distinguish among many kinds of mammals. It makes no difference to ticks that, for example, a dog might be wise to distinguish a predatory mountain lion from potential prey like the red brocket deer. The tick will confuse these two with each other and these with the dogs as well.

Ticks are also vectors for parasites, and because of the ways ticks fail to distinguish among mammals whose blood they indiscriminately suck, these parasites can pass from one species to another. This indiscrimination is a form of confusion, which of course has its limits. If the tick confused everything with everything else, there would be no thinking here and no life; confusion is only productive when it is constrained.

For the tick, one kind of mammal is, in Peircean terms, iconic of another. I want to highlight this view of iconism, which I introduced in the previous chapter, because it goes against our everyday understandings of the term. When we treat icons (signs that signify through similarity) we usually think of the ways in which we take them to be like some aspect of something else

that we already know to be different. We do not, as I mentioned, confuse a stick figure depiction of a man posted on the door of a washroom with the person who might enter through that door. But I'm alluding here to a more fundamental—and often misunderstood—iconic property, one that underlies all semiosis. To the tick, mammals are equivalent, simply because the tick doesn't notice the differences among the beings it parasitizes.

This iconic confusion is productive. It creates "kinds." There emerges a general class of beings whose members are linked to each other because of the ways they are all noticed by ticks, who do not discriminate among them. This emergence of a general class matters to the beings involved. Because the tick confuses these warm-blooded beings, other parasites can travel among them (the "mammals") through the tick. This, in fact, is how Lyme disease is transmitted from deer to humans.

The world of living beings is neither just a continuum nor a collection of disparate singularities waiting to be grouped—according to social convention or innate propensity—by a human mind. It is true that categorization can be socioculturally specific and that it can lead to a form of conceptual violence in that it erases the uniqueness of those categorized. And it is also true that the power of human language lies in its ability to jump out of the local in ways that can result in an increased insensitivity to detail. Speaking of a Japanese insect collector, Hugh Raffles writes:

After collecting for so many years, he now has "mushi" eye, bug eyes, and sees everything in nature from an insect's point of view. Each tree is its own world, each leaf is different. Insects taught him that general nouns like *insects*, *trees*, *leaves*, and especially *nature* destroy our sensitivity to detail. They make us conceptually as well as physically violent. "Oh, an insect," we say, seeing only the category, not the being itself. (2010: 345)

And yet seeing the world with "bug eyes" in many instances actually involves confusing what we might otherwise take as different entities, and this sort of confusion is neither exclusively human nor only destructive.

Borges's character Ireneo Funes, mentioned in this chapter's epigraph, was thrown by a wild horse and suffered a head injury, with the result that he could no longer forget anything. He became "*memorioso*." But living selves are precisely not like Funes, who was incapable of forgetting the distinctive features of "every leaf on every tree of every wood." This, as Borges points out, is not thinking. The life of thoughts depends on confusion—a kind of "forgetting" to notice difference. Generals, such as kinds and classes, emerge from and

flourish in the world through a form of relating based on confusion. The real is not just the unique singularity, different from everything else. Generals are also real, and some generals emerge as a product of the relations among living thoughts beyond the human.

KNOWING WITHOUT KNOWING

How could Amériga, Delia, and Luisa presume to guess at what their dogs were thinking? More generally, how can we ever hope to know these other living selves with whom we relate? Even if we grant that nonhuman life-forms are selves, doesn't there exist, in Derrida's (2008: 30) words, such an "abyssal rupture" separating us from them that theirs might be better thought as an "existence that refuses to be conceptualized" (9)? Might these "absolute other[s]" (11) not be like Wittgenstein's lion; even if they could talk, who would understand them? Thomas Nagel's (1974) answer to the question he posed his fellow philosophers, *What is it like to be a bat?*, was decisive; although there is surely something that it is like to be a bat—that bats, in effect, have some kind of selfhood—we can never know it. We are just too different.

Granted, Amériga, Luisa, and Delia will never know with certainty what their dogs were thinking as they barked at that feline moments before it attacked them, but they could make some good guesses. What, then, might a theory of relating look like that started, not with the search for some secure knowledge of other beings, but with the sorts of provisional guesses that these women were forced to make about the guesses their dogs, in turn, might be making? Such a theory would not begin with what Haraway (2003: 49) calls "irreducible difference," nor would it take the refusal to be conceptualized, or its logical opposite, absolute understanding, as inhabitable endpoints.

Absolute otherness, irreducible difference, incommensurability—these are taken to be the hurdles that our theories of relating must strive to overcome. That there exist differences that are radically inconceivable—differences that are so unimaginable that they are "incognizable" as Peirce (1992d: 24) critically calls them—implies an opposite: that knowability is based on intrinsic self-similarity. It implies that there exists such a thing as "being itself" in all its singularity, which we might comprehend if we could just adopt "bug eyes." These poles are taken to define how beings can relate to and know each other.

However, when we consider “the living thought,” similarity and difference become interpretive positions (with potential future effects). They are no intrinsic characteristics that are immediately apparent. “All thought and knowledge,” writes Peirce, “is by signs” (CP 8.332). That is, all thinking and knowing is mediated in some way.

This has important implications for understanding relating. There is no inherent difference between the associations of living thoughts that constitute the living thinking knowing self and those by which different kinds of selves might relate and thereby form associations. Further, because selves are loci of living thoughts—emergent ephemeral waypoints in a dynamic process—there is no unitary self. “There is no one thing that one could “be” “[A] person is not absolutely an individual. His thoughts are what he is saying to himself; that is, is saying to that other self that is just coming into life in the flow of time” (Peirce CP 5.421). Because all experiences and all thoughts, for all selves, are semiotically mediated, introspection, human-to-human intersubjectivity, and even trans-species sympathy and communication are not categorically different. They are all sign processes. For Peirce the Cartesian *cogito*, the “I think,” is not exclusively human, nor is it housed inside the mind, nor does it enjoy any exclusive or unmediated purchase on its most intimate object: the self that we commonly think of as the one doing our thinking.

Peirce illustrates this by asking us to imagine what red looks like to others. Far from being a private phenomenon, he argues, we can be pretty confident that we can have some sense of this. We can even have some idea of what this color is like to a blind person who has never seen red but who gathers from others that it resembles the sound of trumpets: “The fact that I can see a certain analogy, shows me not only that my feeling of redness is something like the feelings of the persons whom he had heard talk, but also his feeling of a trumpeter’s blare was very much like mine” (CP 1.314).¹⁶ Peirce concludes by suggesting that self-knowledge is ultimately like these processes: “My metaphysical friend who asks whether we can ever enter into one another’s feelings . . . might just as well ask me whether I am sure that red looked to me yesterday as it does today” (CP 1.314). Introspection and intersubjectivity are semiotically mediated. We can only come to know ourselves and others through the medium of signs. It makes no difference whether that interpreting self is located in another kind of body or whether it is “that other self”—our own psychological one—“that is just coming into life in the flow of time,” as one



FIGURE 5. What a hawk looks like to a parakeet. Photo by author.

sign is interpreted by a new one in that semiotic process by which thoughts, minds, and our very being qua self emerge.

Rather than make knowledge of selves impossible, this mediation is the basis for its possibility. Because there is no absolute “incognizable” there is also no absolute incommensurability. We can know something of how red might be experienced by a blind person, what it might be like to be a bat, or what those dogs might have been thinking moments before they were attacked, however mediated, provisional, fallible, and tenuous these understandings may be. Selves relate the way that thoughts relate: we are all living, growing thoughts.

A simple example illustrates this. The Runa make scarecrows, or more accurately “scare-parakeets,” in order to scare white-eyed parakeets from their cornfields. They do so by binding together in a cross two flattened pieces of balsa wood of equal length. They paint these with red and black stripes using *achiote*¹⁷ and charcoal, respectively. They also carve the top part to fashion a head and paint big eyes on it, and they sometimes insert the distinctively barred tail feathers of an actual raptor at the ends of the pieces of wood that will serve to represent the tail and the wings (see figure 5).

The elaborate fashion in which the Runa decorate this scarecrow is not an attempt to “realistically” represent a raptor from the human point of view. Rather, it constitutes an attempt to imagine what from the parakeet’s perspective a raptor looks like. The scarecrow is an icon. It stands for a raptor by virtue of the likeness it has with the raptor for somebody—here, the parakeet. By virtue of stripes, big eyes, and actual tail feathers, the scarecrow captures something of what a raptor is like for a parakeet. This is why parakeets, but not humans, confuse these scarecrows with raptors. Proof of this is that these scarecrows successfully keep parakeets away and are thus made from year to year in Ávila. We can know something of what it is like to be a parakeet, and we know this by the effects that our guesses at how parakeets think can have on them.

ENCHANTMENT

It is very difficult from within our contemporary analytical frameworks to understand the biological world as made up of living thoughts. This, following Max Weber’s (1948a, 1948b) diagnosis of the disenchantment of the modern world, is in part an effect of the spread of scientific rationalism. As we come to increasingly see the world in mechanistic terms we lose sight of the telos, the

significance, the means-ends relations—in short, the mean-ings, as I call them, to highlight the close relationship between means and meanings—that were once recognized in the world. The world becomes disenchanting in the sense that ends are no longer to be found in the world. The world becomes literally meaningless. Ends become displaced to a human or spiritual realm that becomes ever smaller and more detached from the mundane world as this vision of science expands to encompass more domains.

If modern forms of knowledge and ways of manipulating the nonhuman world are characterized by an understanding of the world as mechanism, then disenchantment is an obvious consequence. Machines, as material objects, are means to achieve ends that are, by definition and design, external to them. When we contemplate a machine—say, a dishwasher—we bracket out the ends that are actually intrinsic to its being, namely, that it was built for some end by somebody. Applying this logic to the nonhuman living world, seeing nature as a machine, requires a similar bracketing and a subsequent ascription of ends to humans, gods, or Nature. Dualism is one result of this bracketing. Another is that we begin to lose sight of ends altogether. Disenchantment spreads into the realm of the human and the spiritual as we come to suspect that perhaps there simply are no ends and hence no meaning—anywhere.

But ends are not located somewhere outside the world but constantly flourishing in it. They are intrinsic to the realm of life. Living thoughts “guess” at and thus create futures to which they then shape themselves. Nor is the logic that structures the living world like that of a machine. Unlike machines, living thoughts emerge whole instead of being built from parts by someone bracketed out of the picture. If we attend to Runa engagements with other kinds of beings, as I aim to do here through this anthropology beyond the human, we can come to appreciate selves (both human and nonhuman) as waypoints in the lives of signs—loci of enchantment—and this can help us imagine a different sort of flourishing in this world beyond the human in which we live.

I’m making a claim here about some of the properties of life “itself.” Although I recognize how something like life itself can be historically circumscribed—that certain concepts can only become thinkable in specific historical, social, or cultural contexts (Foucault 1970)—I want to reiterate something I discussed more fully in the first chapter. Language and the related discursive regimes that condition so much of our thought and action are not closed. Although we must of course be cautious about the ways in which language (and by extension, certain socially stabilized modes of thought and action) naturalizes categories of

thought, we can venture to talk about something like life “itself” without being fully constrained by the language that carries this forth.

Nonhuman selves, then, have ontologically unique properties associated with their constitutively semiotic nature. And these are, to a certain extent, knowable to us. These properties differentiate selves from objects or artifacts. Treating nonhumans generically—indiscriminately lumping together things and beings—however, misses this. And this, to my mind, is the biggest shortcoming of STS, the dominant approach for expanding the social sciences to consider nonhumans.

STS brings nonhumans and humans into the same analytical framework through a form of reductionism that leaves concepts like agency and representation unexamined. As a consequence the distinctively human instantiations of these become stand-ins for all agency and representation. The result is a form of dualism in which humans and nonhumans acquire mixtures of thing-like and humanlike properties (see chapter 1).

Latour (1993, 2004), the main proponent of this approach, for example, attributes agency either to that which can be represented or to that which can resist our attempts at representation (see also Pickering 1999: 380–81). But these characteristics only capture, what, in Peircean terms would be called the secondness, that is the actuality or brute factuality, of the entity in question (see chapter 1)—for anything can potentially resist representation or be represented—and this simply reinstates the material/meaning divide STS tries to overcome. We still have, on the one hand, the material (now agentified), and, on the other, those humans (now made a little more obtuse and less certain of their omniscience) who represent or misrepresent things, as the case may be.

But resistance is not agency. Conflating resistance and agency blinds us to the kinds of agency that do in fact exist beyond the human. Because telos, representation, intentionality, and selfhood still need to be accounted for and because the way such processes emerge and operate beyond the human is not theorized, Latourian science studies is forced to fall back on humanlike forms of representation and intentionality as operative in the world beyond the human. These are then applied, if only metaphorically, to entities otherwise understood only in their secondness.

Substances, for example, undergo the “sufferings” of trials (Latour 1987: 88), and they sometimes emerge successfully as “heroes” (89). The piston of an engine is more reliable than a human operator, “since it is, via the cam, *directly interested*, so to speak, in the right timing of steam. Certainly it is more directly

interested than any human being" (130; Latour's emphasis). And scientists use "a set of strategies to enlist and interest the human actors, and a second set to enlist and interest the non-human actors so as to hold the first" (132).

This approach to nonhuman agency overlooks the fact that some nonhumans, namely, those that are alive, are selves. As selves, they are not just represented, but they also represent. And they can do so without having to "speak." Nor do they need a "spokesperson" (Latour 2004: 62–70) because, as I discussed in chapter 1, representation exceeds the symbolic, and it therefore exceeds human speech.

Although we humans certainly represent nonhuman living beings in a number of culturally, historically, and linguistically distinct ways, and this surely has its effects, both for us and for those beings thus represented, we also live in worlds in which how these selves represent us can come to matter vitally. Accordingly, my concern is with exploring interactions, not with nonhumans generically—that is, treating objects, artifacts, and lives as equivalent entities—but with nonhuman living beings in terms of those distinctive characteristics that make them selves.

Selves, not things, qualify as agents. Resistance is not the same as agency. Nor, contra Bennett (2010), does materiality confer vitality. Selves are the product of a specific relational dynamic that involves absence, future, and growth, as well as the ability for confusion. And this emerges with and is unique to living thoughts.

ANIMISM

I want to return to the anecdote with which I began this book. Recall that when I was in the forest on a hunting trip I was told to make sure to sleep faceup. This way if a jaguar were to pass by he would see me as a being capable of looking back and would leave me alone. If I were to sleep facedown, I was warned, that potential passing jaguar might well treat me as prey and attack me. My point was that this anecdote forces us to recognize that how jaguars see us matters to us, and that if this is so, then anthropology cannot limit itself to asking how people see the world. I noted that by returning the feline's gaze, we allow jaguars the possibility of treating us as selves. If, by contrast, we were to look away, they would treat us as, and we may actually become, objects—literally, dead meat, *aicha*.

The linguist Émile Benveniste (1984) observes that the pronouns *I* and *you* position interlocutors intersubjectively through mutual address, and accord-

ingly he considers these true “person” pronouns. By contrast, the third person is more accurately a “non-person” (Benveniste 1984: 221). It refers to something outside of the discursive interaction. If we extend this reasoning to trans-species encounters, then jaguars and humans, in this act of looking back at each other, would, in a sense, become persons to each other. And in the process, the Runa, in a way, would also become jaguars.

Indeed, as I mentioned in the introduction, the Ávila Runa are renowned—and feared—throughout lowland Runa communities for their ability to become shape-shifting were-jaguars. A person who is treated by a jaguar as prey may well become dead meat. By contrast, one who is treated by a jaguar as a predator becomes another predator. Predator and prey—puma and aicha—are the two kinds of beings that jaguars recognize. As with the tick, how jaguars represent other beings makes beings into kinds. And what kind of a being one thus becomes matters.

Puma in Quichua simply means “predator.” For example, in Ávila the name for the crab-eating raccoon,³⁹ whose diet includes, among other things, crustaceans and mollusks, is *churu puma*, snail predator. Because the jaguar exemplifies the quintessence of predation, it is simply known as puma. Runa who survive encounters with such predators are by definition, then, runa puma, or were-jaguars (the term *Runa* is not only an ethnonym; it also means “person” [see chapter 6]). One survives, then, by not being noticed as prey by a puma. But in the process one also becomes another kind of being, a puma. And this newfound status translates to other contexts and creates new possibilities.

Puma is a relational category—not, in this respect, unlike the pronouns *I* and *you* (see chapter 6). That we can become puma by returning a puma’s gaze is a way of saying that we both are kinds of *Is*—that we both are kinds of persons. The Runa, like other Amazonians, treat jaguars and many other non-human beings as soul-possessing, signifying, intentional selves. They are (to use a recently resuscitated term) animists; for them, nonhumans are animate. They are persons.

Animism, as it is currently being theorized by people like Descola (2005) and Viveiros de Castro (1998), is quite different from its earlier social evolutionist and sometimes even racist incarnations, and it has provided an important foil for critiquing Western mechanistic representations of nature. And yet such critiques of the ways we in the “West” represent nature only asks how other humans come to treat nonhumans as animate. In this respect these approaches stand in continuity with such classical treatments of animism as

Lévy-Bruhl's *How Natives Think* (1926). The case of the jaguar troubles this project; if jaguars also represent us we cannot just ask how it is that some of us humans happen to represent them as doing so.

Animism, to my mind, gets at something more far reaching about the properties of the world, and this is why thinking with it is central to an anthropology beyond the human. It captures an animation that is emergent with life, hence my title, *How Forests Think*. Runa animism grows out of a need to interact with semiotic selves qua selves in all their diversity. It is grounded in an ontological fact: there exist other kinds of thinking selves beyond the human.

I recognize of course that those we call animists may well attribute animacy to all sorts of entities, such as stones, that I would not, according to the framework laid out here, consider living selves. If I were building an argument from within a particular animistic worldview, if I were routing all my argumentation through what, say, the Runa think, say, or do, this discrepancy might be a problem. But I don't. Part of my attempt to open anthropology to that which lies beyond the human involves finding ways to make general claims about the world. These claims don't necessarily line up with certain situated human viewpoints, like, say, those of animists, or those of biologists, or those of anthropologists.

How Forests Think, not *How Natives Think*, about Forests (cf. Sahlins 1995): if we limit our thinking to thinking through how other people think we will always end up circumscribing ontology by epistemology (chapter 1 suggests a solution to this problem). I am making here a general claim about selfhood. This general claim—which is not exactly an ethnographic one in the sense that it is not circumscribed by an ethnographic context, even though it is suggested, explored, and defended, in part, ethnographically—is that living beings are loci of selfhood. I make this claim empirically. It grows out of my attention to Runa relations with nonhuman beings as these reveal themselves ethnographically. These relations amplify certain properties of the world, and this amplification can infect and affect our thinking about the world.

One might say that the animal person is the model of the universe for animists, whereas for us it is the machine. Ontologically speaking, each has its own truth: animals are persons, and there are things about the world that do resemble particulate machines (which is a reason why reductionist science is so successful). But my goal here is not to say which one is right or to point out where each fails but rather to see how certain kinds of engagements, based on

certain presuppositions that themselves grow out of those engagements, amplify unexpected and real properties of the world that we can harness to think beyond the human as we know it.

Runa animism is pragmatically oriented. The challenge for the Runa, as people who engage intimately with the beings of the forest in order, in large part, to eat them, is to find ways to enter this vast ecology of selves to harness some of its plenty. This requires being attuned to the unexpected affinities we share with other selves while at the same time recognizing the differences that distinguish the many kinds of selves that people the forest.

PERSPECTIVISM

Like many Amazonians, people in Ávila approach this through a way of understanding others that Viveiros de Castro (1998) has described as "perspectival." This stance assumes a fundamental similarity among selves—that all kinds of selves are *Is*. But it also allows for a way to account for the unique qualities that characterize different kinds of beings. It involves two interlocking assumptions. First, all sentient beings, be they spirit, animal, or human, see themselves as persons. That is, their subjective worldview is identical to the way the Runa see themselves. Second, although all beings see themselves as persons, the ways in which they are seen by other beings depends on the kinds of beings observing and being observed. For example, people in Ávila say that what we perceive as the stench of rotting carrion a vulture experiences as the sweet-smelling vapor emanating from a steaming pot of manioc tubers. Vultures, because of their species-specific habits and dispositions, inhabit a different world from that of the Runa. Yet because their subjective point of view is that of persons, they see this *different* world in the same way the Runa see their own world (Viveiros de Castro 1998: 478).¹⁹

A tendency to see things perspectively permeates daily life in Ávila.²⁰ For instance, a myth that explains why the Amazon bamboo rat²¹ has such a loud call relates how this creature once asked a fallen log what women's genitals look like from its vantage point. Since such logs constitute the preferred causeways that women use to traverse their gardens, the rat figured that the log was in a privileged position to know this.²² Alluding to the rat's abundant whiskers, the log responded, "Like your mouth." Hearing this, the rat responded, "Oh stop,"²³ and then exploded in the bawdy laughter that is now associated with its distinctive loud, long, and seemingly uncontrollable staccato call as well as

its onomatopoeic name *gunguta*.²⁴ The humor in this myth for people in Ávila is as much about the sexually explicit reference as it is about the perspectival logic.

Another common form of perspectival joking in Ávila, as well as in other Runa communities, occurs when two people share the same name. Because I share my first name with a man in Ávila the running joke was that his wife was married to me.²⁵ His older sister jokingly addressed me as *turi* (sister's brother), and I addressed her as *pani* (brother's sister). Similarly, a woman who shares my sister's middle name called me brother, and one with my mother's name called me son. In all these cases shared names allowed us to inhabit a shared perspective. It allowed us to create an affectionate relationship despite the fact that our worlds are so different.

Perspectivism is certainly a historically contingent aesthetic orientation—an orientation that, *pace* Viveiros de Castro, we might, in this sense, describe as "cultural"—but it is also an ecologically contingent amplificatory effect of the need to understand semiotic selves in a way that simultaneously recognizes their continuity with us as well as their differences. It is a response to the challenges of getting by in an ecology of selves whose relational webs extend well beyond the human, and it emerges from everyday interactions with forest beings.

People in Ávila try to make sense of these various selves that inhabit the forest by trying to see how they see, and by imagining how different perspectives interact. One man took delight in explaining to me how the giant ant-eater adopts the perspective of ants in order to fool them; when the anteater sticks its tongue into ant nests, the ants see it as a branch and, unsuspecting, climb on. In their interactions with animals, the Runa, in many ways, try to emulate the anteater. They attempt to capture the perspective of another organism as part of a larger whole. This is what is involved in making a scarecrow. It is also employed in certain techniques used to catch fish. Ventura's father used to paint his hands a dark purple with the crushed fruits of *shangu*, a distant ginger relative,²⁶ so that armored catfish²⁷ would not notice his attempts to grab them from underneath the rocks and boulders in the river.

Such ecological challenges of understanding how the anteater eats ants, or how to make a scarecrow that will scare parakeets, or how to fish for catfish without being recognized by them requires an attentiveness to the points of view of other organisms. This attentiveness grows out of the fact that ants, parakeets, armored catfish, and indeed all the other life-forms that make up

the rain forest, are selves. Who and what they are is, through and through, the product of the ways they represent and interpret the world around them and the ways in which others in that world represent them. They are selves, in short, that have a point of view. This is what makes them animate, and this animation enchants the world.

THE FEELING OF THINKING

People in Ávila take great pleasure in finding a viewpoint that encompasses multiple perspectives. One Ávila myth exquisitely captures this aspect of a perspectival aesthetic. It begins with a hero on top of his roof patching it. When a man-eating jaguar approaches, the hero calls out to him, "Son-in-law, help me find holes in the thatch by poking a stick through them." From the vantage point of someone inside a house it is quite easy to spot leaks in the thatch because of the sunlight that shines through them. However, because roofs are so high, it is impossible, from this position, to patch these. A person on the roof, on the other hand, can easily patch the holes but cannot see them. For this reason, when a man is patching his roof he will ask someone inside to poke a stick through the holes. This has the effect of aligning inside and outside perspectives in a special way; what can only be seen from the inside suddenly becomes visible to the person on the outside who, seeing these two perspectives as part of something greater, can now do something. Because the hero addresses and "sees" the jaguar as son-in-law, the jaguar thus hailed feels obligated to fulfill the functions incumbent on this role. Once the jaguar is inside, the hero slams the door shut and the structure suddenly turns into a stone cage that traps him.

A perspectival stance is certainly a practical tool, like the stick used to link inside and outside views, but it also affords something else. It allows one to linger in that space where, like a shaman, one can be simultaneously aware of both viewpoints as well as how they are connected by something greater that, like a trap springing shut, suddenly encompasses them. The attention people in Ávila give to such moments of awareness is a signature of Amazonian multinatural perspectivalism. This is lost when multinatural perspectivalism is taken up as a more generic analytic shorn of its shamanistic component (see, e.g., Latour 2004).

I propose that this perspectival mythic episode, in which the hero comes to unite these divergent perspectives through a vantage that encompasses them,

captures, savors, and makes available something about life “itself.” It captures something about the logic of the thoughts of the forest. And it captures the feeling of being alive to this living logic in moments of its emergence. It captures, in short, what it feels like to think.

Regarding this experience of coming to see inside and outside perspectives by virtue of something greater that encompasses them, consider Peirce’s discussion of the experience of learning to move one’s hands simultaneously and in opposite directions such that they trace parallel circular paths in the air: “To learn to do this, it is necessary to attend, first, to the different actions in different parts of the motion, when suddenly a general conception of the action springs up and it becomes perfectly easy” (Peirce 1992c: 328).

Like Peirce’s example, the jaguar-trapping myth captures what it feels like when a self “suddenly” comes to see different perspectives as contributing to the more general whole that unites them. As such it calls to mind what Bateson (2002) calls “double description,” which he considers central to life and mind. In thinking about double description I draw on—but simplify—Hui, Cashman, and Deacon’s (2008) analysis of the concept. Bateson illustrates what he means by double description through binocular vision. By recognizing the similarities and systematically comparing the differences between what each eye sees, the brain, performing a “double description,” comes to interpret each of these inputs as part of something more encompassing at a higher logical level. Something novel emerges: the perception of depth (Bateson 2002: 64–65).

Bateson asks, “What pattern connects the crab to the lobster and the orchid to the primrose and all the four of them to me? And me to you? And all the six of us to the amoeba in one direction and to the back-ward schizophrenic in another?” (2002: 7). His answer: double description is operative in the form-generating dynamics that make these entities what they are and how they are connected. The production of a series of roughly similar legs in a “proto-crab” enabled, over evolutionary time, the adaptive differentiation among these legs (some developing into claws, etc.), which allowed the organism as a whole to better “fit” or represent its environment. Just as depth emerges when the brain compares the differential duplication of ocular perspective, a crab as an organism with an overall form that fits a given niche (enabling it, for example, to walk sideways on the ocean floor) emerges over evolutionary time as an embodied interpretation of the duplication of gradually differing legs. Both involve double descriptions.

The lobster also emerges as a form that is the embodied product of a double description involving the differential duplication of appendages. Via different genetic mechanisms, the distinctive overall shape of the orchid and the primrose flower (each adapted to its respective pollinators) also results, in each case, from a double description involving the differential duplication of petals. When we compare crabs and lobsters, and these to the pair of plants, as Bateson does, we also perform double descriptions; we recognize the similarities and systematically compare the differences among these to reveal the double description that is operative in making each kind of organism what it is. When we then compare the ways we use double description to arrive at this realization with the way double description operates in the emergence of these biological forms, we see that our form of thinking is of and like the biological world; what is more, double description itself emerges as a conceptual object thanks to this higher-order double description.

Developing double description from the double description manifest in the world so that double description as a generative modality of mind becomes apparent gives us, then, the added experience of what it is like to think with the double description that is operative in the world. Or, to put it in the terms of this book: thinking with forests allows us to see how we think like forests in ways that reveal some of the sylvan properties of the living thought itself as well as how we experience these properties.

A shamanistic perspectival aesthetic cultivates and reflects on this process. In the jaguar-trapping myth a higher-order vantage "suddenly . . . springs up," which connects inside and outside perspectives as elements of something greater. This allows the listener to experience the feeling of a new living thought as it emerges; it captures what it feels like to think. In Ávila this is personified in the figure of the shaman, which is the Amazonian quintessence of a self, for all selves, as selves, are considered shamans (see Viveiros de Castro 1998) and all selves think like forests.

THE LIVING THOUGHT

Lives and thoughts are not distinct kinds of things. How thoughts grow by association with other thoughts is not categorically different from how selves relate to one another. Selves are signs. Lives are thoughts. Semiosis is alive. And the world is thereby animate. People, like the Ávila Runa, who enter into and try to harness elements of a complex web of living thoughts are inundated

by the logic of living thoughts such that their thoughts about life also come to instantiate some of the unique qualities of living thoughts. They come to think with the forest's thoughts, and, at times, they even experience themselves thinking with the forest's thoughts in ways that reveal some of the sylvan properties of thought itself.

To recognize living thoughts, and the ecology of selves to which they give rise, underscores that there is something unique to life: life thinks; stones don't. The goal here is not to name some essential vital force, or to create a new dualism to replace those old ones that severed humans from the rest of life and the world. The goal, rather, is to understand some of the special properties of lives and thoughts, which are obscured when we theorize humans and nonhumans, and their interactions, in terms of materiality or in terms of our assumptions (often hidden) about symbolically based linguistic relationality.

For Bateson, what makes life unique is that it is characterized by the ways in which "a difference" can "make a difference" (2000a: 459). Differences in soil can, thanks to layers of living representational relationships, come to make a difference for plants immersed in a complex semiotic ecology. And these differences can make a difference for other life-forms as well. Semiosis clearly involves differences; thoughts and lives grow by capturing differences in the world. And getting certain differences right—dogs need to be able to differentiate between mountain lions and deer—is vital.

But difference, for the living thought, is not everything. A tick doesn't notice the differences between a mountain lion and a deer, and this confusion is productive. Attending to the ways other kinds of selves inhabit and animate the world encourages us to rethink our ideas of relationality built on difference. The way selves relate is not necessarily akin to the ways in which words relate to each other in that system we call language. Relating is based neither on intrinsic difference nor on intrinsic similarity. I have explored here a process prior to what we usually recognize as difference or similarity, which depends on a form of confusion. Understanding the role that confusion (or forgetting, or indifference) plays in the living thought can help us develop an anthropology beyond the human that can attend to those many dynamics central to living and thinking that are not built from quanta of difference.



Soul Blindness

Out of sleeping a waking,
Out of waking a sleep;
Life death overtaking;
Deep underneath deep?

—Ralph Waldo Emerson, *The Sphinx*

Ramun, the schoolteacher's ten-year-old brother-in-law, pitched his skinny mass out of Hilario's doorframe and called out earnestly, "Pucaña!" By now we were pretty sure that something had gone wrong. Pucaña and Cuqui still hadn't come home. We didn't yet know that they had been killed by a feline, but that was what we were starting to suspect. Huiqui had straggled in moments earlier with a gaping hole at the back of her head. Hilario was patiently cleaning her wound with some rubbing alcohol from my first-aid kit. Ramun still harbored some hope that Pucaña would turn up. And so he called out her name once more. When she didn't appear he turned to us and said, "What's-its-name. I'm calling the one that's become shit." Amériga responded, "She must have become shit. That's what jaguars do. They just shit them out."¹

After retracing our steps to the patchwork of forest and fallows where the women had been harvesting fish poison and where they had heard the dogs' last barks, we finally found their bodies. The dogs had indeed been killed, if not exactly eaten, by a feline, which the family would later conclude was a jaguar and not the mountain lion that the women had originally imagined the dogs had mistaken for a deer. Huiqui would not make it through the night.

Selves, like Pucaña, or like us, are ephemeral creatures. They can come to inhabit ambiguous spaces—no longer fully interactive subjects that can be

named and that, like Pucaña, can also potentially respond to these names, or quite yet transformed into inanimate objects like dead meat, aicha, or jaguar shit. Nor, for that matter, can they fully inhabit that final space of silence; *chun* is the word Luisa used to describe it. Rather, selves can come to be caught somewhere in the space between life and death, somewhere in that ambiguous space of "what's-its-name" (*mashti*, in Quichua),² of the almost nameless— not exactly here with us but not fully elsewhere either.

This chapter is about the kinds of spaces and transformations, the flip-flops, the difficulties, and the paradoxes captured by the word *mashti*. It is about the different ways in which selfhood can dissolve and the challenges this poses for beings living in an ecology of selves. Such dissolutions come in many forms. There is, of course, the catastrophe of organismic death. But there are also many kinds of disembodiments, and many ways in which selves can become reduced from a whole to an objectlike part of another self. And, finally, there are ways in which selves can break down as they lose the ability to perceive and interact with other selves as selves.

This chapter is also about selves and objects and their co-constitution, and it is especially about how selves create objects and how they can also become objects. And it is about the difficulties this fact of life poses for us, as well as what an anthropology beyond the human can learn about such difficulties, thanks to the peculiar ways in which such difficulties become amplified in this particular ecology of selves of the Ávila region.

Although the beginning of life on this earth surely represents, as Jesper Hoffmeyer (1996: viii) so nicely phrased it, the moment when "something" became "someone," that something did not exactly exist before there was a "someone." It is not so much that things didn't exist before there were beings to perceive them but rather that before living thoughts emerged on this earth nothing ever came to stand in relationship to a self as an object or as another. Objects, like selves, are also effects of semiosis. And they emerge out of semiotic dynamics that exceed the human.

This chapter, then, is about the various dissolutions of self that living creates. It is about what Stanley Cavell (2005: 128) calls the "little deaths" of "everyday life"—the many deaths that pull us out of relation. That death is such a central part of life exemplifies what Cora Diamond (2008) calls a "difficulty of reality." It is a fundamental contradiction that at times overwhelms us humans with its sheer incomprehensibility. And this is compounded by another difficulty: such contradictions are at times, and for some, completely



FIGURE 6. When dead animals are brought home from the hunt they are fondled with curiosity by children and studiously ignored by adults. Photo by author.

unremarkable. The feeling of disjunction that this lack of recognition creates is also part of the difficulty of reality. Hunting, in this vast ecology of selves, in which one must stand as a self in relation to so many other kinds of selves who one then tries to kill, brings such difficulties to the fore; the entire cosmos comes to reverberate with the contradictions intrinsic to life (figure 6).

LIFE BEYOND THE SKIN

The particular configuration of matter and meaning that constitutes a self has a fleeting existence. Pucaña and the other dogs in some real sense ceased being selves the moment they were killed by the jaguar. Living selfhood is localized around such fragile bodies. To say that a self is localized, however, does not mean that it is necessarily or exclusively inside a body, "shut up in a box of flesh and blood," as Peirce critically put it (CP 7.59; see also CP 4.551), or "bounded by the skin," in Bateson's words (2000a: 467). Life also extends beyond the confines of one particular embodied locus of selfhood. It can potentially exist in some sort of semiotic lineage thanks to how selves are represented by other selves in ways that matter to these subsequent selves.

Beyond individual death there is, then, a kind of life. And the generality of life, its potential to spread into the future, in fact, depends on the spaces that such singular deaths open up (see Silverman 2009: 4). Ventura's mother, Rosa, died while I was living in Ávila. But she did not altogether cease being. According to her son, she entered "inside" (*ucuman*) the world of the spirit masters—the beings who own and protect the animals of the forest (see chapters 4–6)—and she married one of them. All that was left of her in the "above" world (*jahuapi*), the world of our everyday experience, was her "skin." According to Ventura, his mother "just discarded her skin" when she went to the spirit world, and this skin was what was left for her children to bury at her funeral. Rosa lived on, outside her old skin, forever, as a timeless nubile bride in the world of the masters.

We will all eventually cease being selves. And yet traces of that unique configuration that constitutes what we take to be our selfhood can potentially exceed our mortal skin-bound bodies and in this manner "we" might persist, in some form, well after the end of our "skins." As I argued in chapter 2, selves are outcomes of semiosis. They are embodied loci of interpretant formation—the process by which one sign is interpreted by another in a way that gives rise to a new sign. Selves, then, are signs that can potentially extend into the future insofar as a subsequent self, with its own embodied locus, re-presents it as part of that semiotic process by which that subsequent self emerges as a self. Life, then, without ever being fully disembodied, potentially exceeds any skin-bound self around which it might currently be localized. Death, as I will argue, is central to the ways a self exceeds its current embodied limits.

Selves exist simultaneously as embodied and beyond the body. They are localized, and yet they exceed the individual and even the human. One way to capture this way in which selves extend beyond bodies is to say that selves have souls. In Ávila the soul—or *alma* as people call it, using a term of Spanish origin—marks the ways in which semiotic selves are co-constituted in interaction with other such selves. Souls emerge relationally in interaction with other souled selves in ways that blur the boundaries we normally recognize among kinds of beings.

Having an *alma* is what makes relation possible in the ecology of selves that the Ávila Runa inhabit. Because, according to people in Ávila, animals are "conscious" of other kinds of beings, they have souls. For example, both the dog and the agouti, a large, edible forest rodent that, along with the pecary, is considered quintessential game (*sicha* in Quichua), possess souls

because of their abilities to “become aware of,”⁵ to notice, those beings that stand in relation to them as predator or prey. The agouti is able to detect the presence of its predator the dog, and therefore it has a soul. This relational capacity is reified; it has a physical location in the body. The agouti’s gall bladder and sternum serve as its organs of consciousness. Through these, the agouti detects the presence of predators. People’s awareness of other beings is also somatically localized. Muscular twitches, for instance, alert them to the presence of visitors or dangerous animals such as poisonous snakes.

Because the soul, as relational quality, is located in specific parts of the body, it can pass to others when these parts are eaten. Dogs are defined as conscious, soul-possessing beings because of their ability to detect agoutis and other game. They can increase their consciousness—as measured by their increased ability to detect prey—by ingesting the very organs that permit the agouti to detect the presence of dogs. For this reason people in Ávila sometimes feed the agouti’s bile or sternum to their dogs.

Following the same logic, they also increase their consciousness of other beings by ingesting animal body parts. Because bezoar stones, the indigestible accretions sometimes found in deer stomachs, are considered the source of deer’s awareness of predators, hunters sometimes smoke their scrapings in order to encounter deer more readily. Some people in Ávila become *runa puma* by drinking jaguar bile; this helps them adopt a predatory point of view, and it facilitates the passage of their souls into the bodies of jaguars when they die.

Like people in Ávila, Peirce saw the soul as a marker of communication and communion among selves. He saw the soul as capturing certain general properties inherent to a living semiotic self in constitutive interaction with other such selves.⁶ Accordingly, Peirce locates the “seat of the soul,” not necessarily in a body, even though it is always related to a body, but as an effect of intersubjective semiotic interpretance: “When I communicate my thought and my sentiments to a friend with whom I am in full sympathy, so that my feelings pass into him and I am conscious of what he feels, do I not live in his brain as well as in my own—most literally?” (CP 7.591). The soul, according to Peirce, is not a thing, with a unitary localized existence, but something more like a word, in that its multiple instantiations can exist simultaneously in different places.

Living thoughts extend beyond bodies. But this fact poses its own problems. Just how do selves extend beyond the limits of the bodies that house them? And where and when do such selves finally come to an end? How life extends beyond bodies in such a way that somehow entangles selfhood with the fact of finitude

is a general problem. It is a problem inherent to life, and it is one that this ecology of selves amplifies in ways that might allow an anthropology beyond the human to learn something about the way that death is intrinsic to life.

In Ávila this problem becomes particularly salient in the interactions people have with runa puma. Were-jaguars are ambiguous creatures. On the one hand, they are others—beasts, demons, animals, or enemies—but, on the other, they are persons who retain powerful emotional connections and a sense of obligation to their living relatives.

This ambiguous position poses serious challenges. Ventura's recently deceased father's puma killed one of his son's chickens. This angered Ventura and made him doubt whether his father, now a jaguar, still continued to consider him a son. Accordingly, Ventura went out to the woods near his house and spoke out loud to his father, who was around there, somewhere, inhabiting the body, and the viewpoint, of a jaguar:

"I'm not an *other*," I told him.
 "I'm your son."
 "Even when I'm away,
 you need to look after my chickens."

He continued to criticize his father for not acting more like a real puma who, instead of snatching chickens, should be out in the deep forests hunting for himself: "Is that what you're gonna do instead of going off to the mountains?" "If you're gonna stick around here," Ventura continued, "you need . . . to catch at least something for me." Shortly after—"It wasn't long—I think it was only about three days"—Ventura's father's puma finally began to fulfill his obligations: "Just like that, he gave me a nice agouti he caught."

This is how Ventura came upon the "gift" from his father. He first discovered the kill site in some brush near his house. He observed that the jaguar had "trampled" a clearing "until it was shiny." From this shiny clearing Ventura followed the trail made by the jaguar pulling the carcass through the brush.

And then I saw
 this,
 this here head, just a head cut off.

...

After that, I looked around and noticed a string of entrails

And then the puma dragged it even further

Ventura, gesturing with his hands, described the quarry he finally came upon.

The whole thing, from here on up was eaten.
But both legs were still good.

Not only did his father's puma leave the prime cuts for his son, but he also wrapped them, just like the gifts of smoked meat presented to invited kin at a wedding.

Covering it with leaves.
Wrapping it up inside them,
he just left it.

The puma's gift is a half-eaten, disemboweled agouti carcass—a body no longer recognizable as a self but now transformed into cuts of packaged meat.

Were-jaguars are ambiguous creatures. One is never sure if they really are still human. Will they forget to fulfill the duties of a relation? And when they are encountered in the forest in all their ferocious otherness might they not also simultaneously be the kind of person to whom we owe obligations?

One day out hunting, Juanico happened upon a jaguar. He shot at it with his small muzzle-loading shotgun, a gun that is not very effective against large felines. This is how, with nothing more than a cascading chain of iconic sound images, he re-created the event:

tyu
(a gun firing successfully)

tsí'ó—
(the vocalization made by the jaguar as it was hit)

tey'c—
(the ammunition hitting its target)

hou'ú—^b
(another vocalization made by the jaguar)

Then, rapidly and somewhat more softly, Juanico imitated the sound made by the lead shot hitting the jaguar's teeth:

tey tey tey tey

The shot shattered the jaguar's teeth and severed some of his whiskers. After the jaguar ran off, Juanicu picked up some of the whiskers that had been blasted off, shoved them—"huo"—into his pocket, packed up the jaguar's half-eaten quarry, and went home.

That evening, the jaguar was still with him. "He made me dream," Juanicu told me, "all night long." In those dreams Juanicu's long-dead *compadre* came to him and appeared just like he had when he was still alive, except that when he opened his mouth to talk his shattered teeth were visible: "How is it that you can do such a thing to a *compadre*?" he asked Juanicu. "Now what am I gonna eat with?" Juanicu's *compadre* then paused and panted, "b'a-," the way jaguar's do, and then he continued, "Like this, I won't be able to eat. Like this I'm gonna die." "And that," Juanicu concluded, "is how he told me what happened . . . that's how the soul tells you at night when you dream." After a long pause, Juanicu added, "I shot *that*. I sent that off."

The runa puma is a strange creature; he reveals himself as a *compadre* and yet pants like a jaguar. Juanicu is bound to *him* through ritual kin ties, and yet he has no remorse about shooting *it*. The runa puma who spoke to Juanicu is a self; the selfsame one he shot is a thing.⁹

This contradictory nature of the puma also came up in the conversations Hilario and his family had about the identity of the jaguar that killed their dogs. Several hours after Ramun called out to Pucaña, the family found her body out in the forest strewn beside Cuqui's and concluded, from the tracks in the area and the bite marks to the backs of their heads, that it had been a jaguar that had killed them.

But they still didn't know what *kind* of jaguar was responsible. They suspected it was a runa puma and not just a regular "forest jaguar" (*sacha puma*), but this, in and of itself, was not a fully satisfying answer. As one family member put it, "Whose puma would bother us like this?" That night they got their response. Everyone dreamed of Hilario's dead father. Amérga dreamed that her father-in-law came up to her wearing a hat and asked her to store a large package of game meat he had been given. Luisa dreamed that she could see her father's testicles and that his intestines were coming out of his anus. Later that evening she dreamed of two calves, one black and one mottled, which, she reasoned, must belong to her father, now himself a master in the afterlife realm of the spirit masters of the forest (see chapter 6).

Hilario's son Lucio was away from home. He had not heard news of the attack from his family and didn't return until the day after it happened. But he

too had dreamed that night of his grandfather, "right there just talking and laughing with me." This, for him, secured the jaguar's identity: "So it must have been my dead grandpa—so it must have been him wandering around." It must have been, that is, his grandfather's soul, in a jaguar's body, wandering the thickets near the house, seeing the world through jaguar eyes, seeing the family's dogs as prey.

Lucio didn't dream of a fierce jaguar but of a loving grandfather. He and his grandfather were together, talking and laughing.¹⁰ Laughter, like crying and yawning, is contagious. It provokes laughter in others and, in this way, unites them, through a kind of iconism, as one in a shared sentiment (see Deacon 1997: 428–29). It unites them, in Peirce's words, in a "continuity of reaction" (CP 3.613). As they laughed together Lucio and his grandfather, for a moment, formed a single self in communicative communion.

But as far as Hilario and his family could tell this jaguar—the beloved grandfather—attacked the dogs for no good reason. Some runa puma attack dogs when their relatives don't observe the taboos that are prescribed after the death of a relative. This was not the case here. And this made the attack incomprehensible. For Lucio, this were-jaguar was "no good." For Hilario, he was "a demon," a "supai." "What else," he asked, "could it be?" "Yeah," Luisa elaborated, "transformed into a demon." Amérga, always questioning, always wanting to know *why*, asked no one in particular, "How is it that, being a person, he could turn into such a creature?" Souls, as Amérga intimated, are persons, like us, and they interact that way with us in dreams. Yet as jaguars in the forest, they might become an *other* kind of being—a kind of being no longer capable of sharing or caring, a kind of being that is less than dead, one that is soulless, a nonperson.

Lucio's dream-time contact with his beloved grandfather and the presence of that demonic jaguar in the forest are one and the same. "The reason I dreamed like that," Lucio reflected, "was that he must have come down for a visit." Amérga agreed. Were-jaguars are supposed to be up in the mountains, far from where people live. It was because Lucio's grandfather had come down from his forest abode that his soul and that of his grandson could come together in laughter the night that Lucio dreamed. This also, in a way, explained the attack on the dogs.

Later that evening at his parents' house, Lucio recalled a recent encounter in the forest with a jaguar, and given the circumstances and his dream he came to the conclusion that this too was a manifestation of his grandfather. Lucio

wanted to kill this puma. In his recollection he makes it "killable" (Haraway 2008: 80) by describing it as a thing, not a person. He used the inanimate pronoun *chái* (that), in its abbreviated form *chi*, instead of the animate *pai*, which in Quichua would be used to mark the third person regardless of gender or status as human:

chillatami carca
that's the one!

And he was angry that his gun malfunctioned and he missed a shot: "Damn!"

Lucio didn't regret having tried to kill this jaguar, even after learning that it harbored his grandfather's soul. His grandfather, who, in Lucio's dream, was more than a third person—was in fact a kind of *we*, united with Lucio in laughter—became for him a mere thing.

FINALIZING DEATH

The boundaries between life and death are never perfectly clear. There are moments, however, when they need to be made so. When a person dies, his or her soul—or souls, for these, like Peirce's, can be multiple and can exist simultaneously in different places—leaves the body. As with Lucio's grandfather's soul, it can enter the body of a jaguar, or it can "climb up" (*sican*) to the Christian heaven, or it can become a master in the realm of the spirit masters of the animals.

What is left is the *aya*. *Aya* in Ávila Quichua means two things. In one sense it simply means the inanimate corpse, the bag of skin that Rosa left behind for Ventura and her other children to bury. In another sense it refers to the wandering ghost of the dead, bereft of both body and soul. The soul imputes consciousness and the attendant ability to resonate and empathize with other beings. The fact that the *aya* has no soul makes it particularly damaging to people. It becomes "*shican*," that is, "another kind"¹¹ of being—one that is "no longer capable of loving people," as one person explained it to me.¹² This is especially true of the relation it has to its family. It no longer recognizes relatives as loved ones. The *aya* are doubly estranged from babies born after their deaths, for their relation to them is even more tenuous. These babies are therefore quite susceptible to illnesses caused by them. Although the *aya* lack consciousness and a soul, they wander the places they used to frequent when alive, trying hopelessly to reattach themselves to the world of the living. By

doing this, they cause sickness to their family through a kind of "mal aire" known as *huairasca*.

The aya inhabit a confused space. We know they are dead, but they think they are still alive. Accordingly, two to three weeks after a person dies and is buried, a ritual feast, known as *aya pichca*,¹¹ is held in order to rid the living of the dangers of the aya still in their presence and in this way to definitively separate the realm of living selves from that of the lifeless. This ritual begins in the early evening and lasts well into the next morning. This is followed by a special meal (see chapter 4). Such an *aya pichca* was held after Jorge. Rosa's husband and the father of Ventura, Angelicia, and Camilo, died. The first part began in the early evening and lasted the entire night, until just before dawn. It consisted of a drinking party in Jorge's abandoned house.

Although there was some crying and some of the distinctive chantlike wailing that often accompanies mourning in Ávila, the mood for the most part was joyous. In fact, Jorge was treated as if he were still alive. When Jorge's daughter Angelicia arrived at his house, she left beside the bed he once slept on a bottle of the home brew *vinillu*, saying, "Here, drink this sweet water."¹² Others would later serve him bowls of fish soup. When a neighbor placed a bottle of *vinillu* on the bench, another fell off. This prompted someone to remark that Jorge, now a little drunk, was knocking over bottles. As we were about to go to Camilo's house nearby, Angelicia's husband, Sebastián, said, "OK, Grandpa, you just wait, we'll be back in a bit."¹³

Despite the ways in which people treated Jorge as if he were still part of an intimate social circle of the living—joking with him, talking to him, sharing food and drink with him, taking temporary leave and then returning to immerse him in a final all-night party—the purpose of this ritual was actually to send Jorge's aya off, definitively and forever, to reunite with his afterbirth (*pupu*) buried back near the Huataracu River, where his parents lived at the time of his birth.¹⁴ Only when that empty remnant of self, marked by the aya, is realigned with the placental trace marking Jorge's emergence as a unique embodied locus of self, will his ghost cease its dangerous wanderings.

We stayed up all night, drinking and joking beside Jorge's bed. As daylight approached, a time when Jorge would have normally gone off hunting, the mood changed. Someone came around and painted our faces with *achiote*. A dab of this reddish orange face paint served as a kind of cloak that made our nature as human selves invisible to Jorge's aya. No longer able to see us as

persons, he would be unaware of our presence, and, in this manner, he would not be detoured from his resting place.

This is how it must be. The aya are extremely dangerous to the living, and unmediated intersubjective encounters with them, such as seeing or speaking with them, can cause death. For such encounters require seeing the world from the point of view of these nonliving, nonselves. And this, in turn, would imply the radical dissolution of our selfhood—something we would not be able to survive.

Our faces now painted with achiote, we took basketfuls of Jorge's possessions outside and placed them on a path that Jorge's aya would walk to reunite with his afterbirth. Children were notably present, and they were encouraged to talk to Jorge as if he were alive, urging him to go on his way with phrases like "Come on, let's go." Meanwhile, Jorge's close relatives got off the trail and hid in the forest. In this manner the aya, now unable to recognize his family, friends, and neighbors, was fanned along on its way with the leaves of *aya chini*, a giant anomalously nonstinging variety of nettle.¹⁷ Some felt a breeze as Jorge's aya departed. His hens, placed in one of his carrying baskets, became frightened, indicating the presence of the departing aya.

At the beginning of the evening Jorge, although dead, was still a person to his living relations, someone with whom his relatives that night ate and drank and laughed and talked. By the end of the evening, however, Jorge had become excluded from that realm of commensality. He was sent forever to the separate social and relational domain of the deceased.

DISTRIBUTED SELFHOOD

Desubjectivization is not only caused by the physical dissolution of the embodied locus of selfhood in death. There are also important ways in which selves that are still living cease being treated as selves by other selves. Although people in Ávila recognize dogs as selves in their own right, they also, on occasion, treat them as tools. They sometimes compare dogs to guns, the implication being that like these "arms" dogs are extensions of human hunting abilities. People in Ávila are careful to observe special precautions regarding the implements that help them hunt. For example, they make sure that any bones from animals they have killed are disposed of in the nearby washing and drinking streams, lest the gun or trap used to kill these animals become "ruined" (*buaglarisca*).

Dogs are also subject to such potential defilement. Hilario's family was careful not to feed the dogs the large bones of the deer they had killed that week before they were attacked. The bones were instead properly discarded in the stream. In this case, because the dogs—rather than a gun or trap—had killed the deer, they might also become “ruined.” Their noses, Hilario remarked, “would become stopped up,”¹⁸ and they would no longer be able to be aware of the game animals in the forest. Dogs, then, in certain contexts are like guns. They become extensions—arms—that expand the locus of human selfhood.

People can also become thinglike tools. They can become parts of a greater whole, appendages of a larger self. At a drinking party, Narcisa, in her early twenties, told us of an encounter she had had the day before with a doe, a buck, and their fawn in the woods near her house. Deer are coveted game animals, and Narcisa was hoping to kill one. But there were a couple of problems. First, women don't usually carry guns, and she regretted that she was unarmed. “Damn!” she exclaimed, “If I had that thing”—that is, a shotgun—“it would've been great!”¹⁹ Second, her husband, who did have his gun handy and was in the vicinity, hadn't seen the deer. Fortunately, however, the night before Narcisa had, as she put it, “dreamed well.” And this led her to think that they would be able to get one of those deer.

Narcisa was faced with the challenge of trying to alert her husband to the presence of deer without at the same time alerting the deer to her own presence. She attempted to “yell” forcefully but at the same time quietly by substituting an increase in volume with an increase in word elongation:

“Aleja—ndru; I quietly cried out.”

The tension in her throat absorbed the volume of the sound without decreasing the urgency of her message. She was hoping, in this way to remain inaudible to the deer. But her attempt failed:

after calling like that
the doe noticed
and slo—wly, turned around [about to run off]

More accurately, Narcisa's attempt to keep the deer from noticing her only partially failed. The buck, as opposed to the doe, “never noticed anything.”

Narcisa's challenge concerning how to selectively communicate to her husband about the deer without the deer noticing points to the ways in which agency becomes distributed over different selves and how some of these selves

can lose agency in the process. Narcisa is the primary agent here. Dreaming is a privileged form of experience and knowledge, and it was she, not her husband, who had dreamed. Narcisa's "good dreaming" was the important action. Her husband's ability to shoot the animal was simply a proximate extension of this.

Narcisa's agency is the locus of cause—it is her dream that counted—and yet her intentions can only be successfully realized by extending herself through objects. Without a gun, she can't shoot a deer, and because men generally are the ones who carry guns in Ávila, she must involve her husband. In this context, however, he is not really a person but rather, like a gun, he becomes an object, a tool, a part through which Narcisa can extend herself.

The distribution of selves and objects in this situation should, Narcisa hoped, have looked as follows: Narcisa and Alejandro should have been united as a single individual in a "continuity of reaction," oriented, together, as predator toward the killing of a deer, here thought of as a prey object. Narcisa and Alejandro, in other words, should have become an emergent single self, whereby two selves become one by virtue of their shared reaction to the world around them (see Peirce CP 3.613). For such a "continuity of being" (CP 7.572), as Peirce has it, creates "a sort of loosely compacted person, in some respects of higher rank than the person of an individual organism" (CP 5.421). This emergent self need not have been equally distributed. Narcisa would have been the locus of this agency, and Alejandro, like Hilario's dog, would have become an arm—an object through which Narcisa extended her agency.

But things did not turn out this way. The continuity of reaction oriented itself, not along species lines, but along gender ones, and these crossed species boundaries in ways that disturbed the particular predator/prey distribution that Narcisa had hoped for. The doe noticed Narcisa. Neither the buck nor the husband ever noticed anything. This is not the way Narcisa wanted things to turn out. Narcisa and the doe here were the sentient selves, united, inconveniently, it turned out, through a continuity of being as a higher-order single self. In "never noticing anything," the males had become objects.

SEEING BEYOND ONESELF

Alejandro and the buck remained unaware of those other selves in their presence. This is dangerous. If trans-species interactions depend on the capacity to recognize the selfhood of other beings, losing this capacity can be disastrous

for beings, such as these two males, who are caught up in the webs of predation that structure this forest ecology of selves. Under certain circumstances we are all forced to recognize the other kinds of minds, persons, or selves that inhabit the cosmos. In this particular ecology of selves that entangles Alejandro and the buck, selves must recognize the soul-stuff of other selves in order to interact with them.

That is, in this ecology of selves, to remain selves, all selves must recognize the soul-stuff of the other souled selves that inhabit the cosmos. I've chosen the term *soul blindness* to describe the various debilitating forms of soul loss that result in an inability to be aware of and relate to other soul-possessing selves in this ecology of selves. I adopt the term from Cavell (2008: 93), who uses it to imagine situations in which one might fail to see others as humans.²⁰ Because in this ecology of selves all selves have souls, soul blindness is not just a human problem; it is a cosmic one.

Soul blindness, in this Ávila ecology of selves, is marked by an isolating state of monadic solipsism—an inability to see beyond oneself or one's kind. It arises when beings of any sort lose the ability to recognize the selfhood—the soul-stuff—of those other beings that inhabit the cosmos and it emerges in a number of domains. I enumerate a few examples here to give a sense of the range and prevalence of this phenomenon. For instance, something known as the hunting soul²¹ allows hunters to be aware of prey in the forest. Shamans can steal this soul with the effect that the victim can no longer detect animals. Without this soul, hunters become "soul blind." They lose their ability to treat prey-beings as selves and can therefore no longer differentiate animals from the environments in which they live.

Hunting is also made easier by the soul loss of prey. Men who kill the souls of animals in their dreams can easily hunt them the next day because these animals, now soulless, have become soul blind. They are no longer able to detect their human predators.

Shamans do not only potentially steal the souls of hunters, they can also steal the souls of the vision-producing *aya huasca* plants of their shamanic rivals with the effect that these plants become soul blind; ingesting them no longer permits privileged awareness of the actions of other souls.

The invisible darts through which the shaman attacks his victims are propelled by his soul-containing life breath (*samai*). When darts lose this breath they become soul blind; they are no longer directed at a specific self but travel aimlessly, without intention, causing harm to anyone that happens upon their

path. Jorge's aya was soul blind in a manner very similar to the shaman's spent darts, it lacked the ability to engage in normative social relationships with its living relatives, and was therefore seen as dangerous.

Adults sometimes punish children by pulling at tufts of their hair until a snapping sound is made. These children become temporarily soul blind; they become dazed and unable to interact with others.

The crown of the head, especially the fontanel,²² is an important portal for the passage of life breath and soul-stuff. Soul blindness can also be effected by extracting life breath through the fontanel. Delia described the jaguar that killed the dogs as having "bit them with a *ta'* on their animal-following crowns."²³ *Ta'* is an iconic adverb, a sound image, that describes "the moment of contact between two surfaces, one of which, typically, is manipulated by a force higher in agency than the other" (Nuckolls 1996: 178). This precisely captures the way in which the jaguar's canines impacted and then penetrated the dogs' skulls. That people in Ávila consider such a bite lethal has much to do with the ways in which this part of the body permits intersubjectivity. The dogs' deaths, then, were the result of a complete loss of their "animal-following" capabilities—the radical and instantaneous imposition of soul blindness.

Some notion of the motivations of others is necessary for people to get by in a world inhabited by volitional beings. Our lives depend on our abilities to believe in and act on the provisional guesses we make about the motivations of other selves.²⁴ It would be impossible for people in Ávila to hunt or to relate in any other way within this ecology of selves without treating the myriad beings that inhabit the forest as the animate creatures that they are. Losing this ability would sever the Runa from this web of relations.

PREDATION

Hunting within an ecology of selves is tricky business. On the one hand, the sharing of food and drink, and especially of meat, is, throughout Amazonia, crucial to the creation of the kinds of interpersonal relations that are the basis for community. Growing children should have plenty of meat, and their grandparents and godparents should also receive regular gifts of meat. Relatives, compadres, and neighbors who come to help clear forest and build houses also need to be fed meat. Sharing meat is central to the fruition of social ties in Ávila. And yet that meat that is shared and consumed was also, at one point, a person. Once one recognizes the personhood of animals, there is always

the danger of confusing hunting with warfare and commensality with cannibalism.²⁵

To notice and to relate to the various beings that live in this ecology of selves, these various beings must be recognized as persons. But to eat them as food, they must eventually become objects, dead meat. If the selves that are hunted are persons, then might not people too eventually become dehumanized objects of predation? Jaguars do, in fact, sometimes attack hunters in the forest. And sorcerers can assume the appearance of predatory raptors. This is why, as Ventura noted, one should never try to kill an agouti that runs into the house, for it is surely a relative, transformed into the fleeing prey of a predatory sorcerer that has taken the form of a raptor. Predation points to the difficulties involved when selves become objects or treat other selves as objects within an ecology of selves.

As I mentioned, at times people consume animals, not as meat, but as selves, to acquire some of their selfhood. Men drink jaguar bile to become puma, and they feed agouti sternums and other soul-containing body parts to their hunting dogs. These substances are consumed raw to preserve the selfhood of the creature being eaten. This, as Carlos Fausto (2007) has noted, amounts to a kind of cannibalism. By contrast, when people want to eat commensally, that is, when the communion is not with the eaten but among the eaters, then the eaten must be transformed into an object. Processes of desubjectivization, such as cooking, are central to this, and the Ávila Runa in this regard are like so many other Amazonians in thoroughly boiling their meat and avoiding cooking processes such as roasting that can leave some of the meat raw (Lévi-Strauss 1969).

An ecology of selves is a relational pronominal system; who counts as an *I* or a *you* and who becomes an *it* is relative and can shift.²⁶ Who is predator and who is prey is contextually dependent, and people in Ávila take great relish in noting how these relationships can sometimes become reversed. For example, a jaguar trying to attack a large land turtle (*yabuati*) is said to have gotten its canines caught in the turtle's carapace and was forced to abandon not only his prey but also his teeth that had broken off and remained lodged in the turtle's shell. Now toothless, the jaguar was unable to hunt and soon began to starve. When the jaguar finally expired, the turtle, that great lover of carrion, with the jaguar's canines still impaled in its shell, began to eat the rotting flesh of its former predator. The jaguar was thus transformed into its former prey's prey. This quintessential *I* is only so by virtue of the relationship it has to an *it*—to

aicha, or prey. When this relationship changes, when the turtle becomes a puma, the jaguar is no longer the predator. Jaguars are not always jaguars; sometimes turtles are the real jaguars. What *kind* of being one comes to be is the product of how one sees as well as how one is seen by other kinds of beings.

Because trans-species relationality is so overwhelmingly predatory in this cosmic ecology of selves, those creatures that don't neatly fit are especially interesting. One class of beings that receives such attention is the mammalian order Xenothera, which includes such seemingly disparate creatures as sloths, anteaters, and armadillos. Another name for this order in the Linnean system is Edentata. Appropriately, this means "rendered toothless" in Latin, and it alludes to one of the most striking features that makes this group a *kind*, both for biologists and for people in Ávila: its members lack "true" teeth; they develop no milk teeth and lack canines, incisors, and premolars. Members of this order have only peglike teeth, if they have any at all (Emmons 1990: 31).

Teeth are central markers of predator status. Hilario once told us of an enormous jaguar that people in Ávila managed to kill many years ago. The canine teeth were the size of small bananas, and, according to him, the village women, imagining how many people those teeth must have killed, wept when they saw them. Because canines embody the essence of a predatory nature, people use jaguar canines to put hot pepper in the eyes of children so that they too will be pumas. Without their canines, jaguars are no longer pumas. Jaguars, people say, die when their teeth wear out.

It is in this context that the members of the "toothless" order are so salient. Legend has it that the collared anteater (*susu*) is prone to fighting with the sloth (*indillama*), saying, "You have teeth and still you have thin arms. If I had teeth I would be even fatter than I already am." Sloths have vestigial peglike teeth; the arboreal collared anteater, like its larger terrestrial cousin the giant anteater, or tamanuhua, completely lacks teeth. Despite their lack of teeth, anteaters are formidable predators. An arboreal anteater can easily kill a dog, and it is indefatigable. It is known to withstand many shots before it falls to the ground, and once on the ground a hunter will often have to pound on its head with a stick to kill it. The giant anteater is considered a puma in its own right. Though it lacks teeth, its sharp claws can be lethal. Juanicu was almost killed by one while I was living in Ávila (see chapter 6). Even the jaguar is said to be afraid of the giant anteater. According to Ventura, when a jaguar encounters a giant anteater sleeping between the buttresses of a tree he will signal for

all to be quiet, saying, "Shh, don't tap [the buttress], big brother-in-law's sleeping."²⁷

Because armadillos lack true teeth they also don't easily fit into the predator/prey ecological cycle of self-perpetuation through object creation. In contrast to the anteaters, armadillos are not at all aggressive, and by no means can they be construed as threatening predators. This is how Emmons (1990: 39) describes their innocuous nature: "[They] trot with a rolling or scuttling gait, some like windup toys, snuffing and grubbing with their noses and forepaws and seemingly unaware of anything more than a foot or two away."

Armadillos have their own kind of spirit master, the *armallu curaga*, or Lord of the Armadillos, who owns and protects them. Appropriately, the entry to this lord's home is a tunnel, like that of an armadillo's burrow. Legend has it that an Ávila man got lost in the forest and was eventually found by this master, who then invited him home to share a meal. When the food was brought out the man saw piles of freshly cooked, steaming-hot armadillo meat. The master, by contrast, saw this same food as cooked squash. Like a squash, the armadillo has a hard "rind." What from our vantage appears as this animal's intestines, the master sees as a tangled mass of seeds enveloped by the fibrous and sticky flesh at the heart of a squash.

Like his armadillos, the lord had no teeth and, to the man's surprise, proceeded to "eat" the food before him by simply inhaling through his nose the vapor that emanated from the cooked servings. When he was finished, the food still looked to the man like perfectly good, intact cuts of meat. But the armadillo master, having already consumed all their life force, considered these cuts excrement and, to the man's dismay, discarded them.

The spirit masters of the forest, such as the *armallu curaga*, are predatory, like jaguars, and they are sometimes considered demonic. However, instead of eating meat and blood as jaguars and other demons do, the Lord of the Armadillos "eats" only life breath because it lacks the teeth that are the markers of a "true" predator. Unlike the jaguar through whose body Ramun imagined Pucaña being transmuted into shit, this strange predator lacks the teeth to eat meat. Therefore he doesn't shit real shit, and that process of desubjectivization is never completed. What excrement this master does produce, he smears on himself as face paint.

The master keeps his armadillos in his garden, and, as one does with squashes, he taps on them to determine if they are "ripe" and ready to eat. The Lord of the Armadillos was kind to the lost man and invited him to take one

of these "squashes" home. But every time the man tried to grab one it would scurle off—vine, leaves, and all.

People on occasion attempt to harness the fact that such predator-prey relationships are potentially reversible. Men sometimes do so by means of charms (*pusanga*), which they employ to attract and seduce animals, and sometimes women. When men use these, they want to disguise their intentions. It is fitting, then, that the most important of these charms is made from the anaconda's skull and teeth. The anaconda, along with the jaguar, is a feared predator. But unlike the jaguar, the anaconda captures its prey by a process of attraction and seduction. It causes animals and people alike to become lost in the forest. The victims, in a sort of hypnotic state, begin to wander around in circles that spiral increasingly inward until they eventually end up at the spot where the anaconda is hiding, waiting to crush them with her embrace. The anaconda is the kind of predator that hunters would like to be: one that is not initially recognized as such.

Of the various organisms that are used as ingredients for hunting or love charms, certainly the metallic-blue-colored whiplash beetle, which Juanico calls *candarira*,²⁹ is among the most visually stunning. On a collecting trip in the woods with him I once pulled back a mat of leaf litter to discover a dazzling pair of the shiny slender beetles endlessly circling one another. The pulverized remains of these insects, according to Juanico, can be placed in the food or drink of a woman one wishes to attract. The woman who comes under the spell of this charm will madly follow the man who is responsible. The insects can also be placed in a hunting bag, to attract peccaries to the hunter. In the endless way in which they circle one another, like the serpent Oroborus biting its tail, these insects bind predator and prey into one, such that their roles become confused. This is seduction; the prey is now predator, and the original predator incorporates this apparent reversal in its mode of predation. Seduction captures the not always equal ways in which subjects and objects reciprocally create each other through cosmic webs of predation.

A similar reversal occurs when the wife of a young man is pregnant. In Ávila such men are known as *aucashu yaya*, which means something like "fathers of beings that are not yet fully human" ("auca" refers to those people considered savages as well as to the unbaptized). Fetuses need continuous contributions of semen and the soul-stuff it contains in order to grow. As Hilario explained, "When the semen passes over" to the woman during sex, "the soul crosses too."²⁹ The resulting loss of soul-stuff over the course of a pregnancy

weakens men. Rosalina once complained to her neighbor that her son had become extremely lazy and unable to hunt since his wife became pregnant. Her son had become soul blind to the other selves in the forest as a result of his soul loss. People in Ávila call this compromised condition *ab'uas*. Expectant fathers experience morning sickness like their pregnant wives, and when the child is born they must observe a period of *couvade* through a variety of restrictions. They also become more aggressive throughout the pregnancy and are prone to fighting.

These expectant fathers lose their ability to be effective predators. They become soul blind. This is felt throughout the forest ecology of selves. Animals will suddenly refuse to enter the traps of expectant fathers, and when such men place fish poison in the water during communal fishing trips fish yields will be very low.

Game animals, recognizing this new status, no longer fear these hunters. Animals sense them as mean, and instead of becoming afraid of them they become angered and aggressive. What is more, even skittish herbivores begin to treat these once-formidable hunters as prey. Animals in the forest that are usually docile and wary, such as deer and the gray-necked wood rail (*pusara*), will suddenly become enraged and sometimes even attack these men. Ventura recounted to me that when his wife was pregnant deer in the forest suddenly charged him—on two separate occasions! And one of the deer even kicked him in the chest.

Ventura's sister, Angelicia, caught a baby coati in a spring trap and decided to keep it as a pet. Contemplating holding this creature in my arms, I asked her if the coati was liable to be aggressive toward me. Knowing that I was single, she laughed and then responded teasingly, "Only if you're an *aucashu* *yaya* . . ."

This weakened and soul blind condition of expectant fathers can be exploited. In the days when herds of white-lipped peccaries still passed through the Ávila region, hunters took the men into the forest and used them as charms, to attract these animals. As the peccaries—suddenly transformed into predators—would furiously charge the weakened and soul blind prey-victim, the victim's companions, who had been hiding in ambush, would jump out and kill the pigs.

Here again, through a process of seduction, predator and prey roles become reversed. The expectant father, unable to perceive other selves in the forest, has become an object. He is *aicha*—dead meat—to the peccaries and a tool, a charm, to his companions. Predator-prey relations are always nested, and this

too is important for this charm to work. What at one level is a reversal of self-object relations (the expectant father is now hunted by his former prey) is nested within a higher-level relationship that reorients the direction of predation; the Runa—here a sort of distributed self in the figure of the group of hunters acting in unison—are reinstated as the true predator, and the pigs become meat, thanks to the temporarily desubjectified state of the expectant father.

Hunting charms in general attract animals that are considered “strong runners” (*sinchi puri*). These include tapirs, deer, and curassows. This too is in keeping with the idea that the goal of hunting and love charms is to make fully intentional selves come to men. The largely stationary and slow-moving sloths, by contrast, are not attracted by charms. Charms, then, are used with beings that are seen to have a lot of manifest “agency.” Only very mobile beings—those with highly apparent intentionality—can be seduced. It is their agency, marked by their ability to act as if they were predators, that allows prey to be seduced. Game meat, *aicha*, must be alive before it can become dead.

In this regard, it is interesting to note that virtually all Ávila hunting and love charms come from animals.³⁰ There is, however, one notable exception: *buhyu panga*, a small hemiepiphytic vine belonging to the Araceae family.³¹ It has the following unusual quality: when the torn pieces of its leaves are thrown into a stream, they dance around on top of the water’s surface.³² The name refers to the way the leaves’ movements resemble those of pink river dolphins (*buhyu*) as they frolic in the confluences of rivers. Like the teeth of the river dolphin, this plant can become an ingredient for charms. Because the pieces of the leaves are drawn to each other and “stick together” (*llutarimun*) on the water’s surface, this plant can attract game or women to the person who incorporates it into a charm. In general, hunting and love charms, in keeping with their purpose of effecting attraction, have as their ingredients only animal products because these come from organisms that are mobile. *Buhyu panga*, a leaf that moves on its own, is an exception that proves this rule.

Like predator/prey distinctions, gender functions as a shifting pronominal marker in this ecology of selves. When I was in the forest on hunting or plant collecting trips, my Runa companion would on many occasions detect game and then tell me to wait behind as he ran ahead with his gun cocked and ready to fire. Many times, as I waited quietly for him to return, the very game he was pursuing would approach me instead. I had this experience on several occasions. Troops of woolly monkeys high up in the canopy would circle back

toward me. Capuchins would jump through the branches just above my head. Lone brocket deer would shoot past me, and small herds of collared peccaries would venture so close that I could almost touch them. When I asked why the animals would come to me instead of to the hunter the response was that, like a woman, I was unarmed and therefore the animals did not see me as a threatening predator and they were not frightened by my presence.

DEFAMILIARIZING THE HUMAN

Ethnographic fieldwork, involving intensive immersion in the lifeways—the language, the customs, the culture—of a foreign society, has traditionally been the preferred anthropological technique for critical self-reflection. Through an often painful and disorienting but ultimately liberating process, we immerse ourselves in a strange culture until its logics, meanings, and sentiments become familiar to us. By doing so, what we once took for granted—our natural and familiar way of doing things—comes, on our return home, to look strange. By stepping into another culture, fieldwork allows us, for a moment, to step outside of our own.

Anthropology allows us to move beyond our culture, but we never quite leave the human. What we are supposed to enter is always another culture. Ávila techniques of self-reflexive defamiliarization, Runa forms of anthropological wandering, by contrast, are not based on traveling to a different culture but on adopting a different kind of body. Natures are what become strange here, not cultures. Bodies are multiple and mutable, and the human body is only one of the many kinds of bodies that a self might inhabit. What kind of anthropology can emerge through this form of defamiliarizing the human?

Because eating entails such a palpable process of bodily transmutation, this form of reflexivity often involves ingestion. Some people in Ávila jokingly refer to edible leafcutter ants as people's crickets (*runa jiji*). Monkeys eat crickets, and when people eat ants—whole and sometimes even raw, crunchy exoskeleton and all—they too, in a certain sense, become monkeys. Another example: Many species of forest and cultivated trees belonging to the genus *Inga* (Fabaceae-Mimosoideae) are called *pacai* in Quichua. They produce edible fruits that can be pulled down off the tree and eaten. The flesh surrounding the seeds is fluffy, white, watery, and sweet. Another legume, *Parkia balsevii*, which belongs to the same subfamily, superficially resembles *pacai* in the shape of its fruits. The fruits of this tree are also edible, but its branches are very high

and the fruits cannot be readily reached. Instead, they fall to the ground when they are overripe or rotten. The flesh begins to ferment and becomes brown and syrupy, like an off-flavored molasses. This tree is called *illahuanga pacai*, the vulture's pacai. From the perspective of vultures, rotting food is sweet; when the Runa eat vulture pacai, they adopt the point of view of a vulture; they come to enjoy rotting fruit as if it were fresh.

Seeing insects as appropriate food or seeing rotting things as sweet is something that other kinds of bodies do. When we eat ants-as-crickets or rotting vulture-pacai-as-sweet we are stepping out of our bodies into those of other beings, and in doing so, we see a *different* world from the subjective, *I*, point of view of another kind of embodiment. We are able, for a moment, to live in a different nature.

An inordinate interest in situating perspectives encourages an almost Zen-like mindfulness to one's precise state of being at any given moment. Here, as Luisa remembered them, are her exact thoughts at the precise moment her dogs were killed by a jaguar in the bush. The banality of her thoughts stands in marked contrast to the attack that was simultaneously taking place.¹¹

Here I was with my thoughts elsewhere,
 thinking, "should I go to Marina's or what?"
 With my mind somewhere else, thinking,
 "in order to go there
 I'll just quickly
 slip on a dress.
 But I no longer have a good dress to change into," I thought . . .

Luisa mindfully situates this daydream, and by extension herself, even though, as she says, she is not present but *elsewhere*. She locates herself in a "here" by mapping her thoughts to a different here: the site of the jaguar's attack on the dogs.

That attack occurred in the intimate female sphere of the abandoned gardens, a patchwork of transitional fallows and forests that América, Delia, and Luisa would regularly frequent to collect fish poison, *chunda* palm fruits, and other products. By invading this domain, the jaguar had wandered outside of its proper territory deep in the forest. At one point Luisa angrily asked, "Are there no ridges at the banks of the Suno River?" "Ridges like that," she implored, "are the right places" for jaguars.¹⁴ Because the jaguar that killed the dogs had undoubtedly been watching the women as they frequented their private gardens and fallows, América, Delia, and Luisa were outraged. They felt that the

presence of the jaguar in this intimate sphere was invasive. Delia noted that such places are supposed to be safe from predators. This is how Amériga described the jaguar's violation of their intimate space:

What kind of beast roams
 around our old dwellings
 just listening to us pissing?
 In those places where we've pissed, the jaguar's just walking around.

Imagining how one is seen in a very private moment through the eyes of another being is profoundly disconcerting. It too is a form of defamiliarization, one that is highly disturbing, for it highlights the vulnerable nature of an isolated self, reduced to oneself—soul blind—cut off from others and exposed to a powerful predator.

SOUL BLINDNESS

What might it be like "see" ourselves in the very process of becoming blind to our own souls? One Ávila myth about the failed eradication of the *juri juri* demons, which Hilario related to his nephew Alejandro while sipping huayusa tea in the predawn hours, explores this terrifying possibility. This myth, I should note, parallels in a curious fashion the Spanish report of the 1578 uprising (see the introduction) in which all the Spaniards were killed, save, according to this account, a young girl who was spared because one of the natives wanted to marry her.

With the help of a tree lizard, the humans found the last hideout of the *juri juri* demons high up in a *chunchu* tree.³⁵ They ringed the tree with big piles of hot peppers, which they set on fire in order to choke out the demons. All the demons plummeted to their deaths except one. When this last *juri juri* finally fell to the ground she assumed the form of a beautiful white woman. A young man took pity on her. They married and began to raise a family. While bathing their children, the demon began to secretly eat them ("sucking their brains out, *tso tso*, from the crowns of their heads," Amériga, to Hilario's annoyance, chimed in). One day the husband awoke from a magically induced sleep tormented by lice. He naively asked his wife to pick them out of his hair. She sat behind him, in a position that made her now invisible to him—a position that made it impossible for him to look back—and began combing her fingers through his hair. And then the man started to feel something strange.

His neck
became burning hot¹⁶

He then observed, in a matter-of-fact way, detached from any emotion:

"I'm bleeding
it would seem that
I'm wounded"

And then, with a flat voice, devoid of any sentiment, the man concluded:

"you're eating me"

"It wasn't," Hilario explained, "like he was angry or anything." He was merely stating—"just like that"—the simple fact that he was being eaten alive.

And he just slept . . .
She made him sleep into his death.

The man is eaten alive but unable to experience this from a subjective perspective. He can never really "see" his wife, sitting behind him, eating him. He cannot return her gaze. Instead, he can only experience his own demise from an external disembodied stance. He can only logically deduce that he is wounded, and then that he is being eaten alive, by the physical effects this action produces. He has become completely "blind" to himself as a self. He feels no pain, nor does he suffer; he just registers the sensation that his neck is burning. Only later does he come to the realization that this is caused by his own blood flowing from his head. His demonic wife causes him to experience his death from outside his body. Before his life fades into indistinction—"Out of sleeping a waking; / Out of waking a sleep; / Life death overtaking; / Deep underneath deep?"—before he moves from affectless catatonia to sleep, and from sleep to death, he becomes an object to himself. He becomes inert, unfeeling. And his only awareness, however dimly perceived, is of this fact. This is a dystopian glimpse of a world where agency becomes divorced from a feeling, purposeful, thinking, embodied, and localized self. This is the final terminus of selfhood: radical soul blindness, an intimation of a world devoid of the enchantment of life, a world with no self, no souls, and no futures, just effects.

